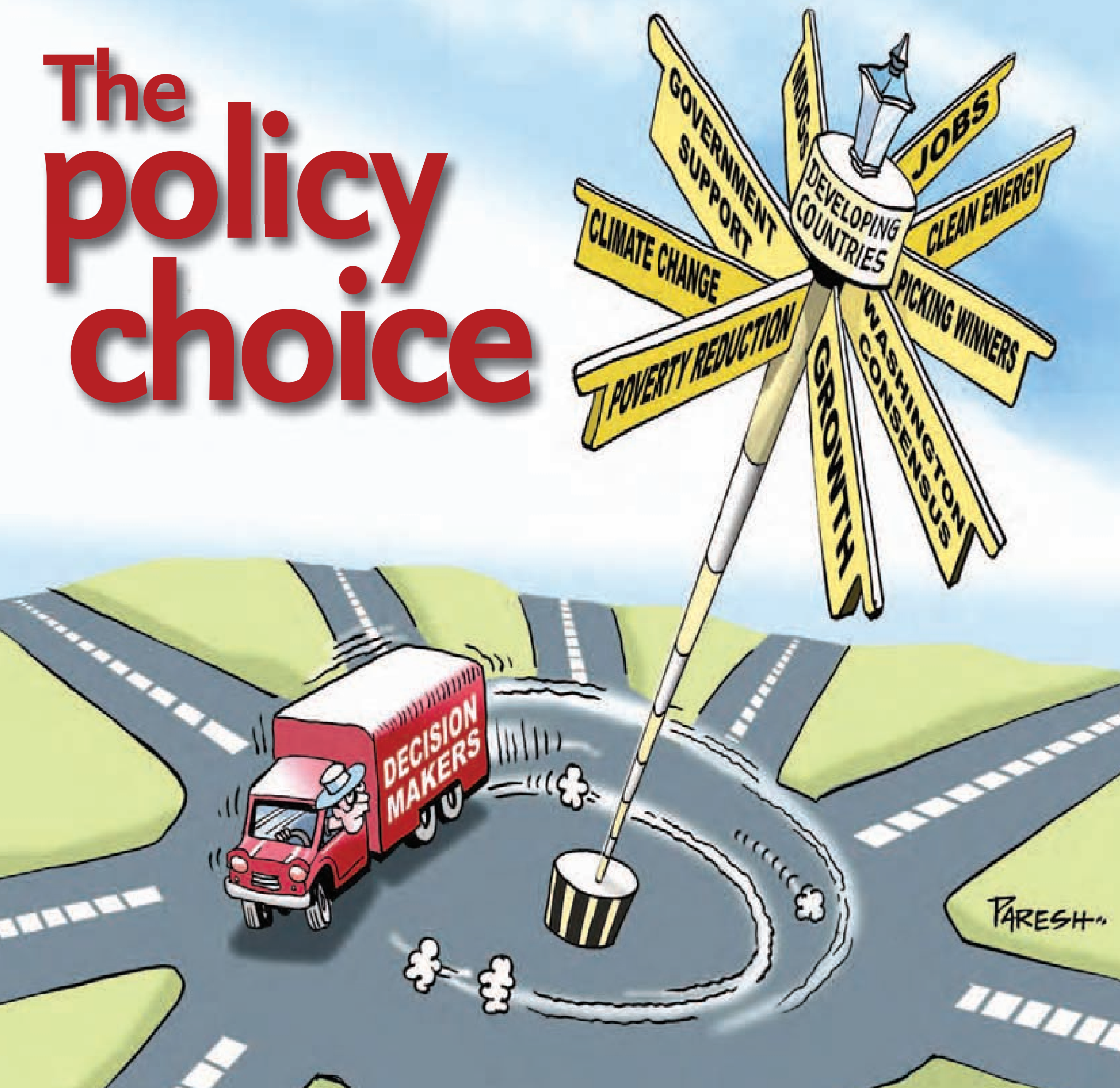
Making It

Number 3

Industry for Development

- Ha-Joon Chang
- Modernizing multilateralism
- China on the rise
- Does micro-finance work?

The policy choice



Issue 1, December 2009

- Rwanda means business: interview with President Paul Kagame
- How I became an environmentalist: A small-town story with global implications by Phaedra Ellis-Lamkins, Green For All
- 'We must let nature inspire us' – Gunter Pauli presents an alternative business model that is environmentally-friendly and sustainable
- Old computers – new business. Microsoft on sustainable solutions for tackling e-waster
- Green industry in Asia: Conference participants interviewed
- Hot Topic: Is it possible to have prosperity without growth? Is 'green growth' really possible?
- Policy Brief: Greening industrial policy; Disclosing carbon emissions

Issue 2, April 2010

- 'After Copenhagen' – Bianca Jagger calls for immediate steps to avoid climate catastrophe
- The International Energy Agency's Nobuo Tanaka looks at energy transitions for industry
- 'Energy for all' – Kandeh Yumkella and Leena Srivastava on what needs to be done to improve energy access
- Women entrepreneurs transforming Bangladesh
- 'Everywhere under the sun' – Suntech CEO, Zhengrong Shi, on the power of solar
- Hot Topic: The pros and cons of biofuels
- Policy Brief: Financing renewable energy; Feed-in tariffs

A new quarterly magazine. Stimulating, critical and constructive. A forum for discussion and exchange about the intersection of industry and development.

Editorial

The theme of this – the third – issue of *Making It: Industry for Development* is industrial policy.

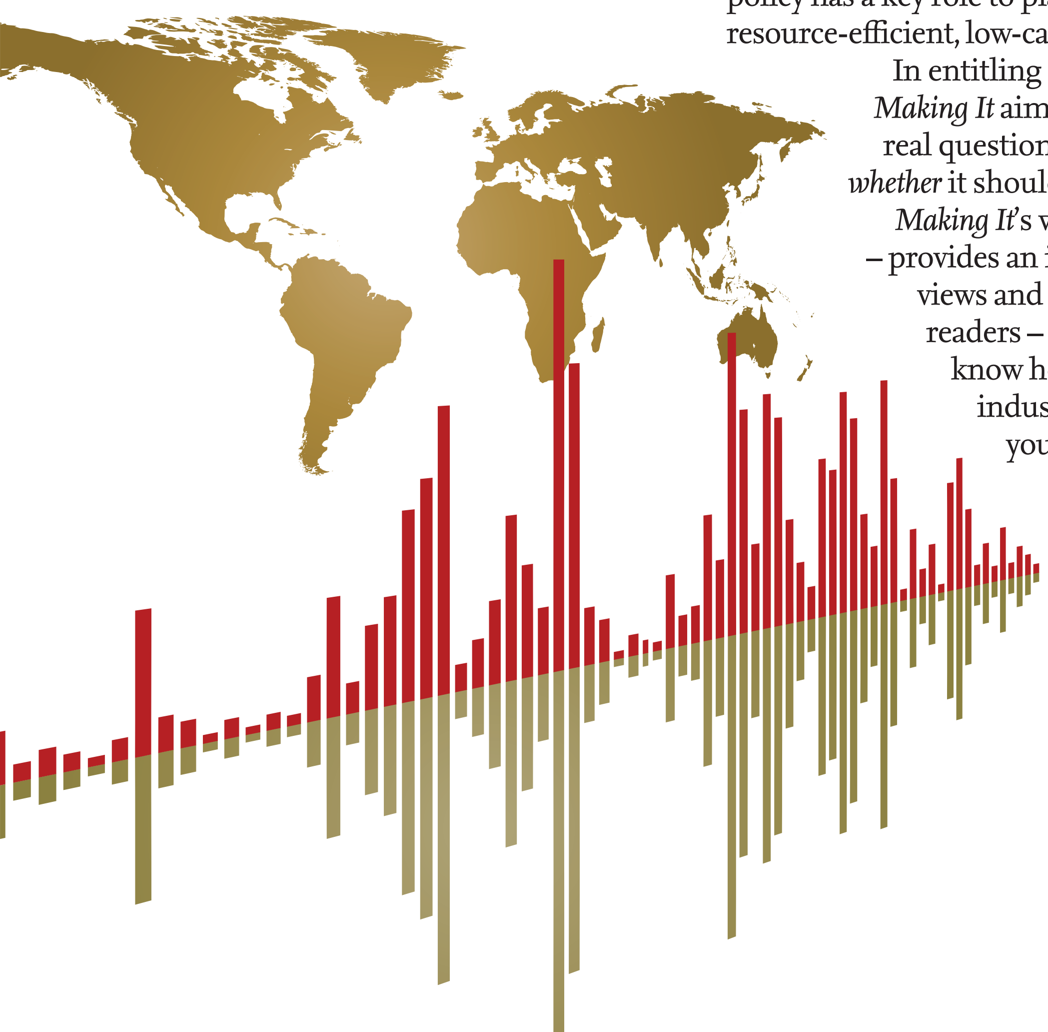
In response to the global economic crisis, governments around the world are desperate to jump-start economic growth. Following the bailouts of the banks and car makers, more recently most of the world's biggest economies have been directing public money into attempts to boost manufacturing.

The era of the Washington Consensus is over. Even if – as many of our contributors note – industrial policy never really went away, it is definitely now fully back on the agenda. In the words of our keynote article author, Ha-Joon Chang, "Industrial policy is not a taboo any more".

The whole world must find the policies to meet the challenge of climate change. Developing countries must try to meet the expectations of their growing populations by building up their economies on the basis of green growth and clean energy. As one of our contributors argues, industrial policy has a key role to play in the world's transition to a resource-efficient, low-carbon growth trajectory.

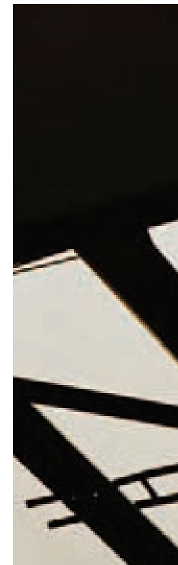
In entitling this issue, "The policy choice", *Making It* aims to highlight the notion that the real question about industrial policy is not *whether* it should be practiced, but *how*.

Making It's website – www.makingitmagazine.net – provides an interactive platform for exchange of views and ideas, and we invite you – our readers – to join in this debate. We want to know how you see this topic, and what industrial policy can do for your country, your community, or your business.



MakingIt
Industry for Development

Contents



32

Editor: Charles Arthur
editor@makingitmagazine.net
Editorial committee: Ralf Bredel, Tillmann Günther, Sarwar Hobohm, Kazuki Kitaoka, Ole Lundby (chair), Cormac O'Reilly
Website and outreach: Lauren Brassaw
Cover illustration: Paresh Nath
Design: Smith+Bell, UK – www.smithplusbell.com
Thanks for assistance to Donna Coleman
Printed by Ueberreuter Print GmbH, Austria – www.ueberreuter.com on PEFC certified paper
To view this publication online and to participate in discussions about industry for development, please visit www.makingitmagazine.net
To subscribe and receive future issues of *Making It*, please send an email with your name and address to subscriptions@makingitmagazine.net
Making It: Industry for Development is published by the United Nations Industrial Development Organization (UNIDO)
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Telephone: (+43-1) 26026-0, Fax: (+43-1) 26926-69
E-mail: unido@unido.org

ISSN 2076-8508

38

Number 3, July 2010

trends

■ Most industrialized countries have experienced severe declines in industrial production in the last two years, the worst being in North America where output has fallen by 20% since 2007, according to the International Yearbook of Industrial Statistics 2010, published by UNIDO. Industrial growth remained largely uninterrupted in the Least Developed Countries (LDCs), particularly LDCs in Africa which maintained an annual industrial growth rate of more than 5% per cent in 2009. (UNIDO)

■ Before the global financial crisis, sub-Saharan Africa had been growing fast, with an average annual growth rate of 6% between 2002 and 2008. The region, which is weathering the global downturn better than most other parts of the world, is projected to grow by 3.8 and 4.5% in 2010 and 2011, respectively – faster than Latin America, Europe, and Central Asia. According to McKinsey Quarterly, telecommunications, banking, and retailing are flourishing. Construction is booming. Private investment inflows are surging. Many of Africa's 50-plus individual economies face serious challenges, including poverty, disease, and high infant mortality. Yet Africa's collective GDP, at US$1.6trn. in 2008, is now roughly equal to Brazil's or Russia's, and the continent is among the world's most rapidly growing economic regions. (McKinsey Quarterly)

■ Following a contraction of 2.1% in 2009, the Economist Intelligence Unit expects Latin America to post a solid recovery of 4.1% in 2010. Aggressive policy stimulus and Chinese demand enabled the region's commodity exporters to lead the recovery, with Brazil emerging from the downturn as early as the second quarter of 2009. But in the past six months, in particular, a feeding through of policy stimulus in the US has been supporting a strengthening of activity in those countries that are more dependent on the US market. Growth is expected to fluctuate at around 4% in subsequent years. This is still well below the average of 5.2% registered in the boom years of 2004-07, but represents a positive performance relative to the region's historical trend growth rate. (Economist Intelligence Unit)

■ Capital investment in new wind power systems is projected to expand from US$63.5bn. in 2009 to US$114.5bn. in 2019. Last year's global wind power

BUSINESS MATTERS

The impact of business on the MDGs

With the deadline for achieving the Millennium Development Goals (MDGs) only five years away, questions have been raised as to the effectiveness of the private sector in influencing progress towards their achievement. A new study assesses the contributions of 20 well-known multinational companies towards influencing the MDGs.

One of the foremost findings is that the private sector plays a larger than expected role in contributing to the MDGs: the sample group's combined activities impacted more than 8.2 million beneficiaries. The study also reveals that the pursuit of business opportunities in developing countries can positively impact MDGs just as effectively as private sector development efforts focused on community investment. Pursuing business activities leads to employment creation, value creation, and supply chain effects, all of which contribute to economic development and various MDGs. Most notably, commercial activities have a significant impact on alleviating poverty (MDG1). By impacting poverty alleviation, MDGs 2, 4 and 5 are also impacted.

These insights highlight the important convergence of the business case for pursuing market opportunities in the developing world with the moral imperative to contribute to human development. More importantly, it suggests that it is by doing business that business can contribute most, something that corporations should be able to embrace more enthusiastically.

– *Business Impact Report, 2010*

Women's economic opportunities

An innovative new report from the *Economist Intelligence Unit* opens a window on to the economic landscape that women face globally, and highlights which countries offer the most opportunities.

The Women's Economic Opportunity Index is a pilot effort to assess the laws, regulations, practices, and attitudes that affect women workers and entrepreneurs. It uses 26 indicators to evaluate every aspect of the economic and social value chain for women, from fertility to retirement. By exploring the binding constraints that women face, it points to steps governments can take to improve opportunities for women and boost overall economic performance.

"Countries have made good progress in levelling the playing field for women over the last few decades, but too many women still cannot exercise their full economic rights," said Leila Butt, a senior economist at the *Economist Intelligence Unit* and research manager for the project.

Women's economic opportunities are influenced not just by a country's regulatory environment, but also by social installations reached a record 37,500 MW. China, the global leader in new installations for the first time, accounted for more than a third of new installations, or 13,000 MW. Solar photovoltaics (including modules, system components, and installation) will grow from a US$36.1bn. industry in 2009 to US$116.5bn. by 2019. New installations reached just over 7 GW worldwide in 2009, a sevenfold increase from five years earlier. Clean Edge reports that the solar photovoltaics and wind power industries currently account for 267,562 and 563,577 direct and indirect jobs worldwide, respectively – a total of more than 830,000 jobs. The report estimates that, by 2019, the number of jobs will be 2,178,919 for solar and 1,122,815 for wind – a total of more than 3.3 million jobs. (Clean Edge)

events

The Third IASTED African Conference on Power and Energy Systems
September 6-8,
Gaborone, Botswana
www.iasted.org/conferences/home-684.html

CSR Asia Summit 2010
September 14-15, Hong Kong
www.csr-asia.com/summit2010

The Right Livelihood Award
September 14-19,
Bonn, Germany
www.rightlivelihood.org/rla30.html

United Nations Millennium Development Goals Summit
September 20-22,
New York, USA
www.endpoverty2015.org

4th International Conference on CSR
September 22-24,
Berlin, Germany
www.csr-hu-berlin.org

The GREEN (Global Resources Environment & Energy Network) Expo
September 28-30,
Mexico City, Mexico
www.ejkrause.com/thegreenexpo/index.html

World Habitat Day
October 4, Shanghai, China
www.unhabitat.org/

Assessing the Role of Prejudice and Discrimination in Power, Poverty and Environmental Sustainability
October 7-10,
Yaoundé, Cameroon
www.4eppse.org/conference.html

Renewable Energy World Asia
November 2-4, Singapore
www.powergenasia.com/index.html

Renewable Energy Africa (REA) Conference and Expo 2010
November 9-11,
Johannesburg, South Africa
www.reafrica.co.za

Photo: Robert Churchill/istock

attitudes and customs. As a result, women's participation in the formal labour force remains well below that of men. Women are also paid less than their male counterparts, and men continue to dominate in sectors with higher wage-earning potential, such as technology and finance.

The study finds that even where legislation is intended to help women, implementation is often weak and opportunities remain limited. Nevertheless, attitudes are changing as economies develop and opportunities for women expand. Countries with stagnant or slow-growing populations increasingly realize that women are essential to an expanding labour force.

In the ranking of economic opportunity for women in 113 economies, Sweden, Belgium, and Norway occupy the top spots. These countries have particularly open labour markets for women, high levels of educational achievement, and liberal legal and social regimes. However, the index tells other stories as well. China, Hong Kong SAR, performs best in the Asia region, ranking in the top 25% in most categories. Mauritius is Africa's best finisher; its labour policies are among the most favourable to women in the region. Excluding Canada and the US, Brazil edges Chile and Mexico for the best score in the Americas. Eastern European countries, especially Bulgaria, have particularly balanced labour-law protections, although retirement ages for men and women are often different. Tunisia comes first in Northern Africa, and Sri Lanka in Southern Asia.

Top 5 countries in Africa, Asia and the Americas

AFRICA
1 Mauritius
2 South Africa
3 Tunisia
4 Namibia
5 Egypt

ASIA
1 China, Hong Kong SAR
2 Israel
3 Japan
4 Singapore
5 Republic of Korea

AMERICAS
1 Canada
2 United States
3 Brazil
4 Chile
5 Mexico

– *Women's economic opportunity.* A new pilot index and global ranking from the Economist Intelligence Unit

GLOBAL FORUM

The Global Forum section of *Making It* is a space for interaction and discussion, and we welcome reactions and responses from readers about any of the issues raised in the magazine. Letters for publication in *Making It* should be marked 'For publication', and sent either by email to: editor@makingitmagazine.net or by post to: The Secretary, *Making It*, Room D2226, UNIDO, PO Box 300, 1400 Vienna, Austria. (Letters/emails may be edited for reasons of space).

LETTERS

Energy for all

The articles "Renewable energy options" and "Energy for all" (*Making It*, issue 2) are inspirational and thought-provoking for everyone. As I dealt with these topics – with a special focus on the Dominican Republic – in my academic research, I found many aspects that underlined my findings. Taking into consideration that developing countries have 80% of the world's population, but consume only 30% of global commercial energy, it's obvious that an acceleration of energy accessibility is necessary.

In the Dominican Republic, where many households do not have access to energy, private enterprises, as well as the government, are increasing initiatives to promote renewable energy. Households in rural areas especially are being targeted for renewable energy options. One exemplary enterprise is Soluz Dominicana, which is offering photovoltaic systems on a fee-for-service business model.

In 2007, the Dominican government passed a law that grants numerous incentives and tax exemptions to investors in renewable energy. The Dominican Republic's perspectives on renewable energy supply are consequently very good, and the strategies applied in this country could serve as an example for other developing countries.

● **Isabel Freyer, received by email**

"Energy for all" (*Making It*, issue 2) is really informative. The Indian model of promoting access to energy for the poor through the combined efforts of all stakeholders is a lesson for many African countries, particularly Uganda, which is good at developing policies, but still fails at the implementation of programmes. The reasons for such policy failures include a poor institutional framework, a lack of awareness, and a lack of human technical resources and of financing.

● **Doreen Namyalo-Kyazze, Director, Energy Solutions Project, Kampala, Uganda**

Photo: Suzlon

Suzlon wind turbine factory

Energy access and the poor

"Energy for all" (*Making It*, issue 2) is OK as far as recommendations for governments go, but at the end of the day nearly all the world's governments are primarily interested in revenue. Unless there are fundamental political changes, providing access to energy will only be an option if people can pay for it. Poor people will remain without energy access.

Take South Africa, for example. In 1994 voters backed the ANC because it said it would provide essential services such as water, health care, education and electricity as a service, and not as a source of revenue. What happened? Let's take electricity. There has been chronic underinvestment in the state-owned power company, ESKOM, and as a result ESKOM has started to raise prices beyond the reach of poor people. If people fail to pay their electricity bills, then ESKOM disconnects their supply altogether. So, under a government that has failed to meet its pre-election promises to provide essential services to the people, energy access is declining.

Thankfully, in places like Soweto, some people are not just sitting back and letting this happen. The Soweto Electricity Crisis Committee (SECC) is a group of electricians who believe it is the people's right to have free power. When poor people are disconnected for failing to keep up with their bills, crusading electricians from the SECC come round to reconnect them. They are reconnecting about 40 houses every week. And what's more, the local police force agrees with what they are doing, and officers are 'turning a blind eye'. "We are giving back what belongs to the people. It's not a luxury," says one of the SECC activists.

● **Ethel Red, received by email**

Wind of change

I would like to congratulate you on publishing *Making It*, a magazine which addresses the issues and concerns related to environment imbalances, global warming and the management of natural resources, and searches for alternatives in a very lucid and understandable format. The articles on wind power generation and bio-mimicry are of great interest. The environment is a collective responsibility, and there is a need to have a comprehensive dialogue and an understanding among experts, scientists and the common people.

For further discussion of the issues raised in *Making It*, please visit the magazine website at www.makingitmagazine.net and the social networking *Facebook* site. Readers are encouraged to surf on over to these sites to join in the online discussion and debate about industry for development.

In India, the participation of corporations is slowly leading to a revolution in terms of focus on the development of technologies related to non-conventional energy generation, and to efforts to reduce carbon footprints. One such company, Suzlon Energy, is purely a home-grown company, working on wind power generation technology for the last 15 years. It has set up big wind power generation farms. As a result of its efforts to popularize this kind of power generation, some of the worst polluting industries, like cement production and the oil and gas industries, are opting for wind power generation as an alternative, clean source of power. The company has a big presence in the states of Gujarat, Maharashtra, and Kerala.

● **Anjana Upadhyay, Gurgaon, India**

Entrepreneurs

I appreciated reading the online interview, "Making it happen – An entrepreneur's perspective: Mexico", because it gave me an insight into not only the life of an entrepreneur, but also into a very personal side of somebody living and working in Mexico. I think this kind of article is useful for supporting and giving a voice to entrepreneurs throughout the world, especially in developing countries.

One thing though, I would have liked to see more of an extensive interview since there are obviously many more aspects of business that impact on the success of an entrepreneur, particularly in developing countries where it is often governments that do not allow entrepreneurship to thrive. How then, in this case, has the Mexican government helped or hindered this businessman, and is it difficult in general for Mexican businessmen to be successful? Does the government push for environmentally responsible policies, etc?

● **Emile Potolsky, received by email**

Microsoft and Greenpeace

Continuing the discussion prompted by the Microsoft article, "Old computers – new business" (Making It, *issue 1), Greenpeace has responded to Microsoft's letter in issue 2. In the most recent Greenpeace* Guide to Greener Electronics, *Microsoft has risen one place in the ranking of companies' policies on toxic chemicals, recycling and climate change.*

The *Guide to Greener Electronics* evaluates company policy and practice **beyond** what is required by regulation…. (Microsoft) has committed to removing PVC and BFRs from its hardware products by or before 2010, and phthalates by the end of 2010. However, it needs to put products on the market that are free from BFRs in printed circuit boards before it can score points for this criterion. It also fails to show support for improvements to the revised European Union RoHS Directive (Restriction of Hazardous Substances in electronics); specifically, a methodology for further restrictions of hazardous substances, and an immediate ban on BFRs, chlorinated flame retardants, and PVC vinyl plastic.

On e-waste, apart from the additional points for information to its customers on take-back and reporting on recycling, Microsoft is rewarded for engaging in an EU coalition supporting Individual Producer Responsibility.

● **Greenpeace**

After Copenhagen

I would like to applaud Bianca Jagger's excellent article "After Copenhagen" in your magazine (*Making It*, issue 2). She is absolutely right – the Copenhagen climate change summit ended in a shameful compromise. The end result was a three page document – an "Accord" (not a treaty because it is non-binding, merely stating principles of which to "take note") which no country has signed up to in any event. It has no lawful authority or standing at all – it is a mere statement of vague intent.

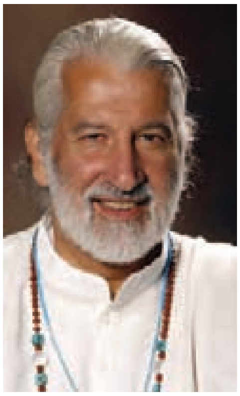
In the absence of a legally-binding treaty for nation states, how about putting the pressure on the multinational companies?

Take, for example, the response of the inhabitants of the native Iñupiat village of Kivalina in North Alaska which is falling into the ocean because ice, formerly a wave barrier, is melting as a result of greenhouse gas emissions. The villagers refused to go quietly. Kivalina v. ExxonMobil Corp., et al., (2008) arguably constituted an important development in rights-based litigation against those principally responsible for climate change. The suit claimed damages related to climate change against nine oil companies (including ExxonMobil, BP and Royal Dutch Shell), fourteen power companies and a coal company.

Their complaint echoes the rights guaranteed under the Universal Declaration of Human Rights and the International Covenant on Economic Social and Cultural Rights in asserting that "Defendants' emissions of carbon dioxide and other greenhouse gases, by contributing to global warming, constitute a substantial and unreasonable interference with public rights".

The complaint cites the Arctic Climate Impact Assessment to show that defendants "conspired to create false scientific debate about global warming in order to deceive the public." The suit may have been dismissed by a United States district court, but the spirit of the action deserves support.

● **John Radford, Manchester, UK**



Industrialization will continue to be the most important avenue of future development, but **ALFREDO SFEIR-YOUNIS** believes that that the world needs a new industrial revolution that is all about people.

From steam engines to human consciousness

The Industrial Revolution that took place in Europe between 1760 and 1850 shifted a way of life from an agrarian economy to an urban/industrial one. Physical technology played a central role in advancing labour productivity, and massively increasing the scale of industrial production and trade. We know now the tremendous human and social challenges that the Industrial Revolution created across the board, and that, even though industrial development has advanced on many fronts, negative patterns still exist in many countries.

Let's recall that the Industrial Revolution created great inequalities, forced women and children to work long hours for low pay, resulted in slums with no basic services (water, sewerage), and failed to provide law enforcement to protect citizens. In addition, there was homelessness, low-quality education, power entrenchment and fragmented social structures, increases in pollution, the misuse of common land, unorganized migration to cities, etc.

Today, the scale and composition of industrial production has greatly changed: from the steam-boat to the most sophisticated cruise lines and cargo ships; from Model T Ford cars to the spaceships that circle the Earth; from epidemics that killed millions to medicines (antibiotics) that save lives; from the one-to-one telephone to an intercommunicating world. However, while there are more sophisticated engines and better machines, the structural patterns of industrialization have not really changed, and we see almost the same human and social results.

Despite attempts at corporate social responsibility, and the adoption of elaborate forms of management, control, finance, and marketing (to name a few), corporations remain the biggest polluters of the world, the major sources of environmental destruction, and the principal drivers of social inequality and injustice. Some corporations possess assets whose value is many times greater than the Gross National Product of several developing countries combined, and their political power is unprecedented.

A new industrial revolution is needed now. Its essence must be to move us from the steam engine to the highest levels of human consciousness. Corporations are made up of people. Technology is created by the human factor. Management is an organized form of human interactions. Industrial processes are an alignment of human beings to production. Marketing and communications influence people's behavioural patterns. The external environment and social impacts affect human beings and all forms of life. Owners, managers, workers, stockholders, consumers, traders...all are people. Thus, the new industrial revolution is all about people, and must be deeply interconnected to people.

If the old Industrial Revolution destroyed nature, brought about the genocide of indigenous populations, exploited workers, excluded women, and oppressed foreign nationals, then the new industrial

ALFREDO SFEIR-YOUNIS (Cho Tab Khen Zambuling) is a Chilean economist, spiritual leader, and founder and president of the Zambuling Institute for Human Transformation. Before opening the Institute in 2005, Sfeir-Younis worked at the World Bank for 29 years, serving as a senior advisor to the managing directors.

revolution must bring about instruments, processes, and forms of governance that will radically change these patterns.

If the core purpose has been to maximize profits for a few corporations, to enhance the power of a few governments, and to increase the quality of life of only a few people, then, today, the new industrial revolution must bring about the maximization of happiness and inner wealth. It must establish the best forms of collaboration, governance, and human interactions in order to expand the collective good to benefit all people; to develop the best quality of life across the planet; to empower people, create opportunities and security; and thus create a world embedded in freedom, justice, abundance, and peace.

We live at a crucial moment in history, when choices must be made in order to attain higher levels of human consciousness and coherence. The situation demands a revolution in values, turning away from economics and finance (competition, independence, and exclusion), and embracing the collective values of interdependence, interconnectedness, solidarity, cooperation, justice, freedom, peace, security, human rights, sustainability, love, compassion, caring, and sharing. These values must be self-realized, and industry must be the human, institutional, and political space to be able to do this. The corporations of the future must become the institutional and organizational space where human beings may attain the highest level of consciousness, and material and non-material welfare, including health and inner peace. As the urban population is now larger than the rural population, and as rural activities acquire an ever-greater industrial character, industrialization will continue to be the most important avenue of future development.

The new industrial revolution must be organized around the following guidelines:

Respect for all forms of life, for all human beings regardless of race, colour, or creed, for nature, and for future generations.

A new eco-morality that conserves, uses, manages, and controls natural resources; that protects and restores ecological niches and life forms that are being depleted; that brings back ecological balance, integrity, rhythm, and sound; and that engages in production, trade, and consumption patterns that do not harm the environment and that are in sync with the Earth's carrying capacity.

Human self-realization that puts economics at the service of people and not people at the service of economics; that eliminates absolute poverty and ends the processes of marginalization and exclusion; that provides decent work so that the workplace provides the conditions for all forms of self-realization; that improves judicial systems to protect the rights of women, children and the elderly; and that puts the focus of education and human resource development on inner development and the expansion of human consciousness.

“We live at a crucial moment in history, when choices must be made in order to attain higher levels of human consciousness and coherence. The situation demands a revolution in values…”

Business and entrepreneurship based on inner awareness of the self, and directed to the natural and human environments; on technology design and implementation that meets people's material and non-material needs rather than just the profit motive; on technological change that creates the conditions for human inner growth and development; and on governance and business management instruments that benefit all people.

Zero tolerance of war, conflict, and weapons; of poisonous substances of any sort; of low quality or unsafe products; of unethical behaviour; and of the destruction of the social fibre of communities.

There are positive signs that this form of industrial revolution is possible if we can deepen and extend corporate attention and commitment to, amongst other things, green labelling, corporate social responsibility, and the Equator Principles of socially and environmentally-sustainable financing. Without the private sector's full engagement in building a truly sustainable future, no positive collective destiny for humankind can be expected. ■

HOT TOPIC

In what is a regular feature, distinguished contributors consider one of the controversial issues of the day. With all the media hype surrounding new online lending platforms, such as Kiva.org, the time is right to ask if microfinance really is an effective poverty reduction tool.

Does microfinance work?

ANIS CHOWDHURY is Professor of Economics at the University of Western Sydney, Australia. Currently, he is working as a Senior Economic Affairs Officer at the United Nations Department of Economic and Social Affairs (UN-DESA).

Professor Mohammad Yunus, the originator of the concept of microfinance, believes that 5% of Grameen Bank's clients exit poverty each year. However, there are few credible estimates of the extent to which microcredit actually reduces poverty.

Ideally one can ascertain the impact of microfinance if the counterfactual – what would have happened to a person who borrowed from a microlender if he/she had not done so – can be easily tested. Many early studies compared borrowers with non-borrowers. But if borrowers are more entrepreneurial than those who do not borrow, such comparisons are likely to grossly overstate the effect of microcredit. Two recent studies attempted to overcome this problem by using randomized sample selection methods. Neither study found that microcredit reduced poverty. One of these studies found no impact on measures of health, education, or women's decision-making among the slum dwellers in the city of Hyderabad, India. The other study found that the provision of microfinance in Manila, the Philippines, had no discernible effects on the probability of being below the poverty line nor did it find any significant impact on the quality of food that people ate.

The findings of the most cited set of studies, based on empirical evidence drawn from comparative experiences in seven developing countries (published in 1996), are also provocative: poor households do not benefit from microfinance; it is only non-poor borrowers who can do well with microfinance and enjoy sizable positive impacts. A vast majority of those with starting incomes below the poverty line actually ended up with less incremental income after getting microloans, as compared to a control group which did not get such loans.

"A US$250 one-year loan would raise a borrower's annual income by US$12.50, or about three cents a day!"

No miracle cure

These findings imply that credit is only one factor in the generation of income or output. There are other complementary factors, crucial for making credit more productive. Among them, the most important is the recipient's entrepreneurial skills. Most poor people do not have the basic education or experience to understand and manage even low-level business activities. They are mostly risk-averse, often fearful of losing whatever little they have, and are struggling to survive. Most prominent promoters of microfinance, including Professor Yunus and Sam Daley-Harris, director of the Microcredit Summit Campaign, recognize that microcredit is not a miracle cure; for it to succeed, other complementary factors are needed.

Some microfinance institutions (MFIs) and non-governmental organizations seem to have understood this need, and are offering training to build management and entrepreneurial skills. However, the focus has been generally on supply-side factors which complement one another to make microinvestment productive. Very little attention has been paid to the demand side. In the absence of an expanding domestic market, microenterprises will most likely replicate a barter economy. In extreme cases of a stagnant market, the availability of credit in order to facilitate transactions can leave the parties even worse off, as they have to repay loans with interest, while seeing no growth in revenues or income. Therefore, it is not surprising that a World Bank-sponsored study (published in 2005) involving 1,800 households in Bangladesh, found only very marginal improvements for borrowers of microcredit. For example, the incomes of women who received microcredit increased by only 8 taka for each 100 borrowed. As one commentator noted, a US$250 one-year loan would raise

Microfinance institutions claim that small loans do reduce poverty, and institutional and individual donors respond with huge donations. However, research suggests that, while microfinance can help in times of crisis, in the long-term its monetary impact is minimal.

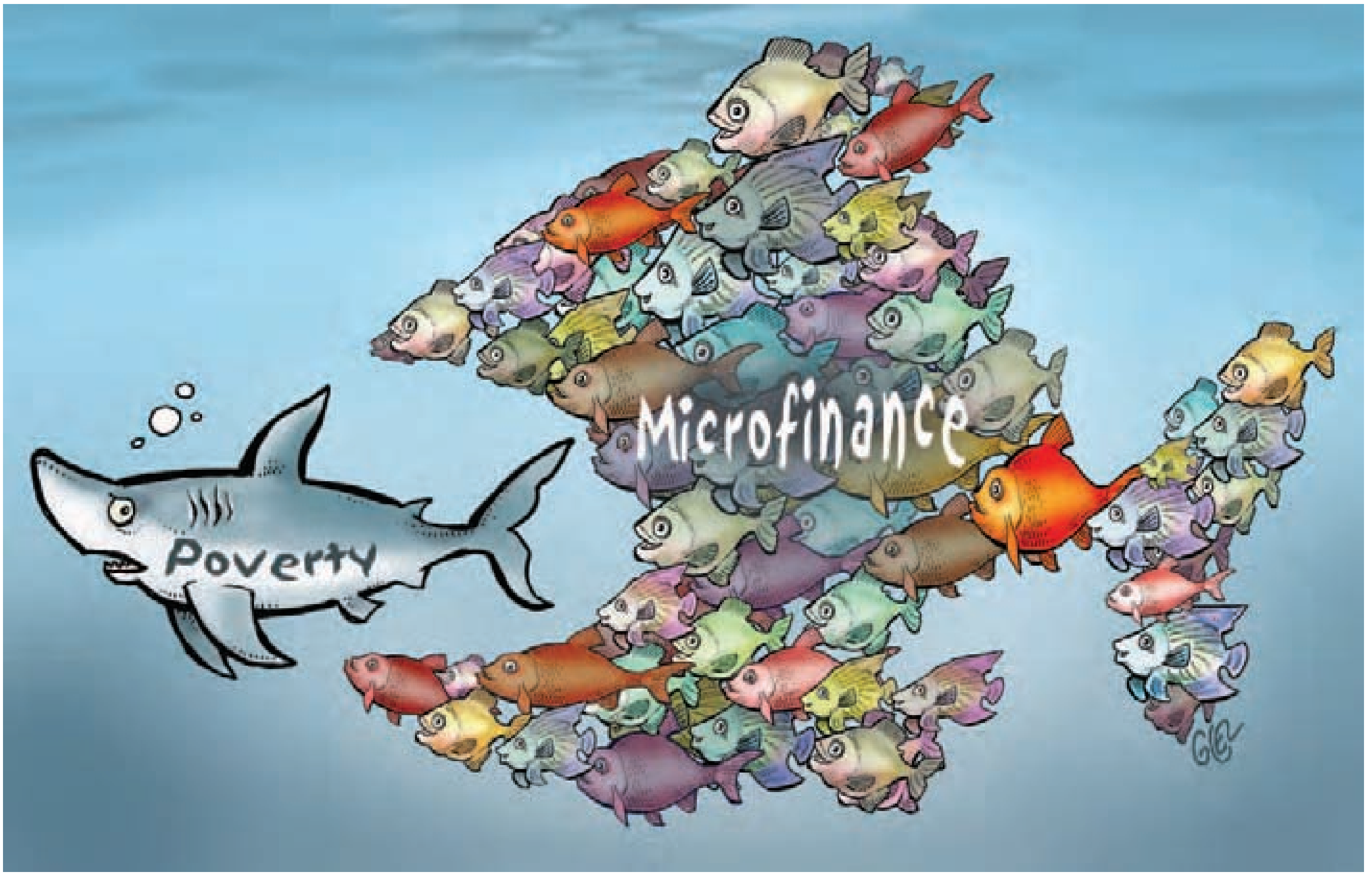


Image: Damien Glez

a borrower's annual income by US$12.50, or about three cents a day!

This modest income gain happened in the context of rapidly expanding garments production in Bangladesh. It would have been an interesting counterfactual to see what would have happened in the absence of the fast expanding garments industry. Consideration of demand-side factors highlights the importance of pro-growth macroeconomic, trade, and industry policies.

In response to the modest findings in terms of monetary measures of poverty, advocates of microfinance cite impressive social progress, such as reduced infant and maternal mortality in Bangladesh. But can such achievements be attributed to microfinance? Sri Lanka was a star performer in social progress long before the microfinance movement started. In recent times, Andhra Pradesh in India has also performed much better than the rest of India in terms of social indicators of development. Microfinance does not seem to have played a big role there either.

Interest rates

The interest rates charged by microfinance institutions have drawn vigorous criticism. There are claims of interest rates ranging from 30 to 100% on an annualized basis. Some defend the high rates on grounds of sustainability; anything less will not attract profit-seeking bankers into this market. However, this argument weakens the claim that microfinance is more cost effective compared to commercial banking loans.

Where the interest rate is at the lower end, it is often due to implicit subsidies. This, then, raises the issue of the social opportunity cost of subsidies; could this money be better utilized elsewhere, such as for public health, education, or supporting agriculture and rural industries? Some defend the MFIs' interest rates by arguing that they are still less onerous than the alternatives offered by moneylenders. Others argue that the returns on capital are indeed high in microenterprises, and that therefore the levying of high interest rates is justifiable. In respect of the latter, it is not clear how these studies impute the cost of 'own labour' – the time and ➤

HOT TOPIC

➤ labour spent by the owner of the microenterprise. In an economy characterized by surplus labour, one can impute a zero shadow price for own labour. In that case, the entire surplus over and above the cost of capital can be regarded as profit or returns on capital. This could be the most plausible explanation for finding high returns from microenterprise loans.

Ideally, own labour should be priced at a "decent" or legislated minimum wage to enhance poverty reduction. Employment (self or otherwise) at a wage below a decent rate only adds to the pool of "working poor", who perhaps are even more vulnerable to shocks, due to the debt burden of microcredit. This could be another explanation for the so-called graduation problem of microenterprises, or why so many loans need to be rescheduled or refinanced, as reported by the Wall Street Journal.

Expansion of microfinance

If the poverty reduction impact of microfinance is so doubtful, how can one explain the movement's phenomenal expansion? The authors of an extensive survey of the literature and interviews with the movement's leading players claim that the success of microfinance is due to innovative business practices involving product design and management, and enabling environments. Similarly, extensive case studies of MFIs in Bangladesh and the Philippines found that the real explanation for their success lay in careful attention to managerial and strategic 'fundamentals'. These include keeping transaction costs low, and matching loan payment schedules to borrowers' income and savings potential.

A political economy explanation for the growth of the microfinance movement is that microfinance campaigners successfully projected the image of the movement, such as empowerment of women, which resonates well with the donor community. The birth of the movement roughly coincided with the rise of neo-liberal ideas in the late 1970s and early 1980s. Thus, the notion that microfinance programmes are primarily engaged in the promotion of small-scale enterprises appealed to major donors. While donors were wary of subsidized credit through state-owned specialized financial institutions, they were quite happy to subsidize microfinance institutions, as they appeared to promote a market economy, and more importantly, they helped to diminish the role of the government.

In liquidity-constrained societies, there is always demand for credit. So, when donor-supported MFIs push the supply of credit, there is no shortage of takers. As a result, microfinance expanded exponentially. However, if the market itself does not expand rapidly, this can only create debt burden or underutilization of credit, and a downward pressure on the returns on investment.

> "The danger of the hype about microfinance is that the needs of small businesses in the informal sector may not get due attention."

Positive contributions

Even the vocal critics admit that microfinance can help the poor smooth consumption over periods of cyclical downturns or unexpected crises. If this consumption smoothing means parents can send their children to school, or buy essential medications, and maintain nutritional intakes of their children, then microfinance is likely to have positive long-term impacts on productivity.

The high interest rates that are charged remain an important concern, and most MFIs have been found lacking in lending to the ultra poor. Nonetheless, it seems that microfinance has significantly dented the informal credit markets by undermining debt-bondage and usury in some agrarian societies. Thus, microfinance is having a modernizing impact.

More importantly, by "democratizing" the credit market, the microfinance movement has also constrained the MFIs' own behaviour. For example, when some MFI officials went to collect repayments immediately following the devastating cyclone Sidr in Bangladesh in 2007, this was widely reported in the national newspapers. As a result, the MFIs acted quickly to suspend loan recovery and to offer softer loan conditions.

In other words, the rapid expansion of microfinance has empowered not just women, but all small borrowers. Note should also be taken of the learning-by-doing effect. Even when own labour in microenterprises is given a zero shadow price, the people who are involved do benefit. They learn some basic principles of business, and with luck, and perhaps some help, may be able to become more viable and even expand. This is akin to apprenticeship where the apprentice gets a low wage, but in exchange gets training in a trade. So, with their support and training programmes, many MFIs are making

A group of women chat outside the offices of a microcredit project in Ouagadougou, Burkina Faso.

Photo: Andy Aitchison/In Pictures/Corbis

some useful contributions. Microfinance gives the unemployed and the poor some opportunities, hope, and self-esteem.

Finally, being successful business ventures, microfinance institutions themselves have also created a large number of well-paid jobs, which should have considerable multiplier effects.

Many of these positive effects cannot be measured in monetary terms, and hence will remain largely unacknowledged in the literature focused on the traditional income or expenditure measures of poverty.

Conclusion

The danger of the hype about microfinance – and the focus on microenterprises – is that the needs of small businesses in the informal sector may not get due attention. The owner-operators of these small businesses have already proven their entrepreneurial acumen, but they face numerous constraints, ranging from inability to access the formal credit market, to difficulties with marketing their products. These enterprises should be supported with easy access to credit and other financial services, such as insurance. Their problems have been exacerbated by neo-liberal financial sector reforms which have sought to promote profit-seeking financial institutions by eliminating state-run, specialized financial institutions that catered for the needs of small and medium-sized enterprises (SMEs) and the agricultural sector. It is now realized that these reforms had their own limitations, and that SMEs and the agricultural sector, especially food production, need state support. Management and operational lessons learnt from successful MFIs can provide valuable inputs into the design of specialized financial institutions for SMEs and the agricultural sector.

● The above is an edited and abridged version of UN-DESA working paper #89

Industrial policy has a key role to play in the transition to a resource-efficient, low-carbon growth trajectory. **WILFRIED LÜTKENHORST**, Managing Director of the Regional Strategies and Field Operations Division of the United Nations Industrial Development Organization (UNIDO), considers the implications.

A changing climate for industrial policy

The return, renaissance, rediscovery or comeback of industrial policy has been widely heralded. This is good news. And let's be honest: industrial policy has never left the scene. It has been practiced in varying shapes and forms in all countries, developed and developing alike. The issue really is: are various policy instruments applied in an uncoordinated, *ad-hoc*, and at times clandestine manner? Or are they openly embedded in a clearly formulated and communicated strategy behind which a country – with all relevant public and private stakeholders – can unite and move forward? It is this latter notion of an agreed vision (where do we want our economy to go and how do we get there?), which is back on the agenda with a vengeance. Sadly, it ➤

Workers building a factory near Hanoi, Viet Nam.

Image: Andrew Wood/istock

has taken a major global economic crisis to drive home the point that markets are all about allocation of resources and efficiency but, in and by themselves, do not take care of long-term societal objectives.

'New industrial policy'

When looking at the policy debate today, in many ways, there is a strong sense of déjà vu. Some of the discourse among economists is revisiting issues already battled over in the 1980s: whether to accept or challenge an economy's comparative advantages; to just set framework conditions or pick and promote winners; to steer foreign investment into priority sectors or allow an indiscriminate inflow; to nurture infant industries or let the forces of globalization prevail, etc.

At the same time, there is, in fact, widespread agreement on key features of a so-called 'New Industrial Policy', among them:

- that framework conditions such as macroeconomic stability, a conducive business environment and openness to trade are a necessary point of departure;
- that a shift from autonomous government action to a strategic public-private dialogue is essential;
- that the focus should move away from setting pre-defined outcomes to getting the policy process right (Dani Rodrik's notion of industrial policy as a "discovery process");
- that, all too often, there is a fixation with formulating fancy strategies, while neglecting the institutional capacities required for their effective implementation;
- that we need to move from dogmatic prescriptions (Washington Consensus) to a sense of pragmatism, to a readiness to 'think outside the box', and to innovate and experiment (sometimes labelled now as the 'Beijing Consensus' – a term coined by Joshua Cooper Ramo in 2004); and
- finally, that we need to maintain a healthy dose of realism and modesty. History is littered with well-crafted industrial policies that failed to achieve their stated objectives and became captive to special interests groups.

Climate change: global market failure

All of the above is fine and dandy. Now enter climate change as the real game changer: as the "defining trend of our time" in the words of the UN Secretary-General; as the "greatest market failure the world has ever seen" in the eyes of Sir Nicholas Stern. Remember political economy 1.01? Isn't market failure one of the fundamental justifications for policy interventions – unless, of course, the risk of policy failure is considered as even bigger?

"Industrial policy today cannot be relevant, cannot be effective, and cannot be credible, unless it is explicitly framed in the context of natural resource scarcity. "

I would indeed argue that industrial policy today cannot be relevant, cannot be effective, and cannot be credible, unless it is explicitly framed in the context of natural resource scarcity. We need to factor in global (and, by the way, also regional and local!) limits to climate change, lest we allow an irreversible tipping point to be reached. And there are positive signs that this is beginning to be understood by both economists and, importantly, by policymakers, particularly in emerging economies. Here a just a few illustrative examples:

- In India, there is growing awareness that climate-related factors will hit the poorest segments of society the hardest, and are likely to lead to a significant slowing down of GDP growth. The nation's environment minister sees India as the country most vulnerable to climate change. A debate on green growth and green energy is intensifying – with or without global agreements.
- In China, massive investment is being undertaken in energy efficiency, renewable sources of energy, and green technologies in general, with over US$60bn. targeted for developing hybrid and electric car technology, and further improving rail transport and electricity grid infrastructure, as well as for a new 10-year clean energy plan. According to the country's State Environmental Protection Agency, as much as 15% of GDP is lost annually due to various types of environmental pollution.
- In Viet Nam, extreme weather conditions and rising sea levels are considered a threat to agricultural and industrial production in half the country, seriously jeopardizing future economic growth. The Government has responded by integrating these concerns into the development plans of all ministries.
- Finally, Brazil is re-discovering the "green" merits of its long and well-established policy to promote renewable fuels. This policy dates back to the early 1970s, and has led to ethanol now accounting for over 50% of light vehicle fuel demand in the country.

Low-carbon growth

If we accept the premise that the transition to a resource-efficient, low-carbon growth trajectory is imperative, and that industrial policy has a key role to play, then what are the implications?

First and foremost, we need to start from the premise that multiple objectives govern any industrial policy. Policy formulation and implementation is always embedded in a political and social context from which it derives its legitimacy. While considerations of climate change and resource efficiency are crucial, other objectives have to be factored in as well. These range from poverty reduction to food and energy security, to job creation, reduction of regional and income inequalities, stimulation of growth and productivity, encouragement of innovation and entrepreneurship, etc. Thus, it is critically important to direct research efforts towards exploring the relationship between these different objectives. What are the complementarities and what are the trade-offs, for example, between energy efficiency, productivity and cost effectiveness; between pushing renewable sources of energy and broadening access to energy; between adaptation measures, patterns of industrial location, and regional disparities; and between CO_2 mitigation action and industrial profitability? Unless a firm foundation is created for evidence-based policy decisions, uncertainty and speculation will prevail.

Secondly, the conventional focus of industrial policy on promoting priority sub-sectors (be it textiles, food processing or electronics) may need to be revisited and subsumed under an orientation towards resource-efficient technologies across the entire spectrum of sectors. This would, among other things, call for enhanced benchmarking efforts, an alignment of research and development incentives and innovation systems with the need to reduce climate impacts, and access for enterprises to financial instruments, including venture capital, for the funding of environmentally-friendly investment.

Thirdly, investment promotion approaches will have to be revisited. Foreign direct investment (FDI) is the key transmitter of new technologies in many developing countries. To a large extent, FDI inflows determine the future technology scenario, the pattern of industrial production and linkages, as well as learning effects for domestic business. By applying the right policy instruments, investments could increasingly be geared towards resource efficient technologies. In this context, industrial zoning approaches targeting green and clean investors (aimed at demonstration and spill-over effects for local businesses) or, conversely, targeting polluting industries (to allow economies of pollution abatement), could assume particular importance.

Fourthly, it should be acknowledged that different groups of countries face distinct challenges, and that policy priorities should reflect this fact. In Least Developed Countries,

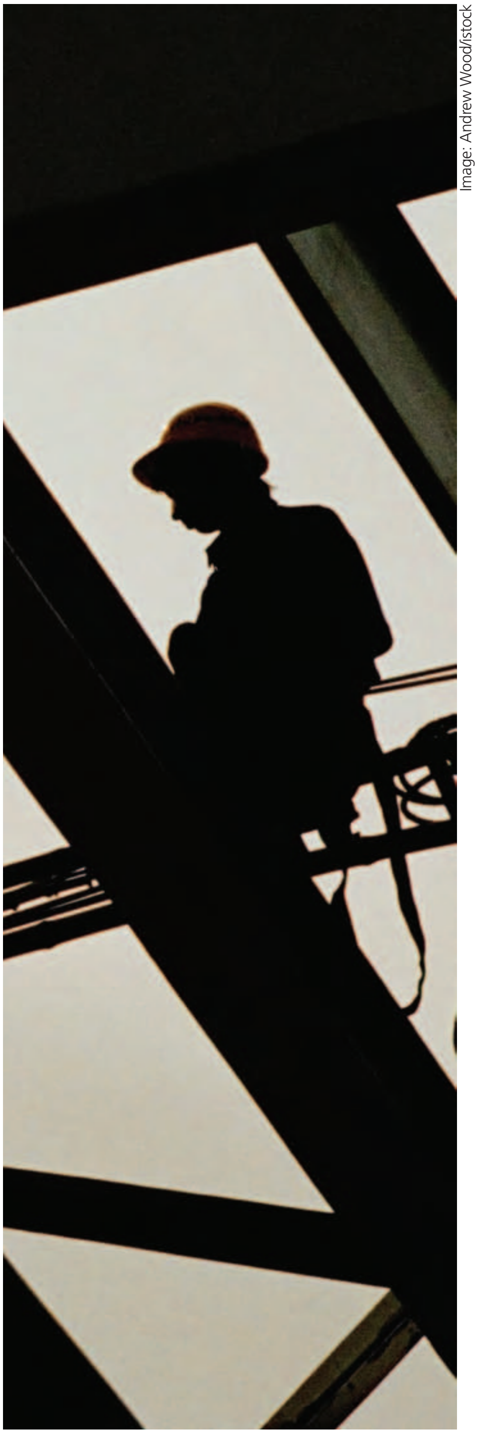


Image: Andrew Wood/istock

"Unless an international solution for the technology transfer funding challenge is found, many developing countries wanting 'to go green' may face a genuine dilemma."

adaptation strategies will often be more pressing than mitigation needs, and energy access goals are likely to be more urgent than energy efficiency considerations. But the same argument cannot be applied to middle-income countries. Here, energy efficiency gains in established industries (specifically heavy industries like steel, chemicals and the like) need to receive priority, and are widely considered to be low-hanging fruits. Yet these fruits still seem to require inputs in terms of information, awareness, and incentives, in order to actually get picked.

Finally, there are general and cross-cutting challenges, such as the greening of trade (i.e., the reduction of the carbon footprint of entire value chains) and, in particular, the promotion of technology transfer through a variety of mechanisms ranging from FDI to official development assistance and the Clean Development Mechanism. State-of-the-art green technologies tend to be high-tech and costly. Who is going to pay for the transfer of proprietary technology? Unless an international solution for the funding challenge is found, many developing countries wanting "to go green" may face a genuine dilemma. Hence, there is a strong case for global action, and some degree of international policy coordination.

The high road

Industrial policy has always been faced with the perils of uncertainty, and with the need to make assessments and judgments that try to anticipate and shape desired future scenarios. However, with the new dimension added by a global context of climate change and resource scarcity, the genuine risk of a global catastrophe "makes the most powerful case for strong climate policy", as recently stressed by Paul Krugman in the *New York Times*. While industry is part of the problem (accounting for 36% of CO_2 emissions), it also offers great opportunities. There will be no solution without developing and diffusing new industrial technologies that consume fewer resources, reduce carbon emissions, abate pollution, and reuse and recycle the waste generated.

Establishing the framework for allowing this to happen, encouraging responsible production and consumption, and ultimately defining a sustainable path to prosperity, are the challenges to which industrial policy today must rise. The gradual decoupling of economic growth from environmental degradation and resource depletion defines the high road to industrialization that countries should strive for – both to save our planet, and to define new frontiers of competitiveness. ■

JAYATI GHOSH believes that state involvement in economic activity is now imperative, and that such involvement must be more democratic and accountable.

Politicizing economic policy

There are several reasons why we urgently need to think seriously about appropriate industrial policies. There are of course the old (or continuing) reasons: that the development project cannot really proceed without some form of explicit or implicit industrial policy; that static and dynamic economies of scale mean that 'late industrializers' need to plan methods of achieving competitive scales in particular activities if they are to survive; and that market-driven investments in a context of economic inequality will simply not generate the required scales of production without some form of intervention.

But there are also newer, and possibly now more pressing reasons for industrial policy. These emerge from structural tendencies (in particular the more basic forms of market failure that relate to human interaction with the natural environment), as well as conjunctural ones (the fact that countercyclical fiscal policy has perforce increased the role of government spending in both mature and developing economies).

What we can now recognize as unsustainable patterns of production and consumption are deeply entrenched in the richer countries, and are aspired to in developing countries. But many millions of citizens of the developing world still have poor or inadequate access to the most basic conditions of decent life, such as the minimum physical infrastructure, including electricity, transport and communication links, sanitation, health, nutrition, and education. Ensuring universal provision of these things will inevitably require greater per capita use of natural resources and more carbon-emitting production. So, both sustainability and equity require a reduction of the excessive resource use of the rich, especially in developed countries, but also among the elites in the developing world, in order to adjust for the necessarily greater resource use of the world's poor.

JAYATI GHOSH is professor of Economics at Jawaharlal Nehru University, New Delhi, and the executive secretary of International Development Economics Associates (IDEAS). She is a regular columnist for several Indian journals and newspapers, and a member of the National Knowledge Commission advising the Prime Minister of India.

Resource consumption

This means that redistributive fiscal and other economic policies must be specially oriented towards reducing inequalities of resource consumption, globally and nationally. For example, countries' essential social and developmental expenditure can be financed by taxes that penalize resource-wasteful expenditure.

Some of the shift can certainly be met through "cleaner, greener technologies" of production, and this clearly requires proactive industrial policies to promote such technologies. But it also requires new patterns of demand, since it is no longer good enough to talk about newer forms of production that are based on the older pattern of consumption. Instead, we must think creatively about such consumption itself, and work out which goods and services are more necessary and desirable for our societies.

This is why the present focus on developing new means of measuring genuine progress, well-being, and quality of life are so important. Quantitative Gross Domestic Product (GDP) growth targets, that still dominate the thinking of regional policymakers, are not simply distracting from these more important goals, but can even be counterproductive. For example, a chaotic and polluting system of privatized urban transport, involving many private vehicles and congested roads, actually generates more GDP than a safe, efficient, and affordable system of public transport that reduces vehicular congestion and provides a pleasant living and working environment.

Strategic thinking

Obviously, the shift cannot be left to market forces, since the international demonstration effect and the power of advertising will continue to create undesirable consumer demands, and unsustainable consumption and production. But public intervention in the market cannot be confined to knee-jerk responses to constantly changing short-term conditions. Instead, planning – not in the sense of the detailed planning that destroyed the reputation of command regimes but strategic thinking about the social requirements and goals for the future – is absolutely essential. Fiscal and monetary policies, as well as other forms of intervention, will have to be used to redirect consumption and production towards these social goals, to bring about such shifts in socially created aspirations and ma-

Image: Csuka László/istock

terial wants, and to reorganize economic life to be less rapacious and more sustainable.

Since state involvement in economic activity is now an imperative, we should be thinking of ways to make such involvement more democratic and accountable within our countries and internationally. Large amounts of public money are being used and (despite the current talk about exiting from stimulus packages) will continue to be used for financial bailouts and to provide fiscal stimuli in the near future. How this is done will have huge implications for distribution, access to resources, and the living conditions of the ordinary people whose taxes will be paying for it. So, it is essential that we design the global economic architecture to function more democratically. And it is even more important that states across the world, when formulating and implementing economic policies, are more open and responsive to the needs of the majority of their citizens.

Democratizing policy

How is this to be achieved? In other words, how can industrial policy – and macroeconomic policy in general – be truly democratized? Obviously, the methods and mechanisms will differ across economies and societies. But some general principles can be listed.

First, the notion that economic policies belong to some technocratic realm that is above politics needs to be dispensed with. Since economic policies are also about income and asset distribution, they are also necessarily about politics, and this has to be recognized, with all the implications of particular policies being fully spelt out.

Second, this means that the economic policies of states have to be developed on a genuinely participatory basis, not in a centralized top-down fashion with some token "consultation" with so-called "stakeholders". This is not a simplistic call for decentralization, which has become another 'flavour of the month' with international donors. Rather, decentralization of public service delivery to enable more control by citizens needs to be combined with a more nuanced and complex form of central control over critical macroeconomic decisions. Nationally elected bodies – not extra-national and unaccountable bodies like the Bretton Woods Institutions and multinational companies – should decide the nature of economic strategy. Balancing the needs and interests of different regions and strata of society would also ensure that the creation of well-paid and productive employment would have priority over GDP growth for its own sake.

Third, non-state actors who exercise inordinate influence over state policies and receive disproportionate benefits from states – such as large corporations or big financial players – need to be brought into the realm of public accountability much more explicitly. As the examples of the gas leak in Bhopal, India, more than two decades ago, and this year's Gulf of Mexico oil spill suggest, this should certainly include attributing responsibility for environmental damage. But it should also mean that corporations which receive implicit and explicit subsidies must function in what is seen as the broader social interest in terms of preventing excessive volatility, focusing on social goals like regional balance and job creation, ensuring quality for consumers, and so on.

Finally, the economic goals of society have to be broadened, moving away from the fixation on income growth and profits, to focusing on the generation of decent employment; the improvement of living conditions rather than just the accumulation of material objects; the ensuring of safety, security and a voice for all citizens; and the encouragement of human creativity. Simply put therefore, the new industrial policy is no longer just about industry, and instead will have to be all about generating human freedom. ■

> **"How can industrial policy – and macroeconomic policy in general – be truly democratized?"**


DEVELOPING NATIONS
INDUSTRIAL POLICY
PARESH

Towards a more productive debate

With the discrediting of orthodox policies, and the exposure of the double standards of the rich countries, industrial policy is no longer taboo. **HA-JOON CHANG** argues for an acceptance that industrial policy can work, at least some of the time, and for 'outside of the box' thinking on how to make it work better.

HA-JOON CHANG teaches economics at the University of Cambridge, UK. He is the author of several influential policy books, including *Kicking Away the Ladder: Development Strategy in Historical Perspective*, and has served as a consultant to the World Bank, the Asian Development Bank, and the European Investment Bank, as well as to Oxfam. He was awarded the 2005 Leontief Prize for Advancing the Frontiers of Economic Thought.

“As Lord Peter Mandelson quipped, there needs to be more ‘real engineering’ and less ‘financial engineering’, recognizing that selective industrial policy has an important role to play”

For the last three decades, industrial policy – or, more precisely, selective industrial policy, where the government intervenes in a way that discriminates between industrial sectors – has been off the mainstream policy agenda. In the English-speaking developed world where neo-liberalism originated, industrial policy came to be denounced as ‘picking losers’ in a misguided attempt to ‘pick winners’. With the intellectual and political shift towards neo-liberalism at the World Bank and the IMF, structural adjustment programmes (SAPs) dismantled existing industrial policies through trade liberalization, privatization, and deregulation of domestic business activities and foreign direct investment – or what are commonly known as the Washington Consensus policies. The rise of Japan and other East Asian economies forced a debate on industrial policy between the late-1980s and the mid-1990s, but even then it was dismissed as something that worked only because of the unique political and cultural conditions of the East Asian countries, such as an exceptionally capable bureaucracy. When the East Asian economies got into trouble, with the bursting of Japanese financial bubble in the mid-1990s and the Asian financial crisis in 1997, industrial policy was blamed as one of the key causes of their economic problems, and declared defunct.

However, the continued economic problems in developing and transition economies that had faithfully implemented orthodox policies – rising income inequality, repeated financial crises, and, above all, a slowdown (or sometimes a collapse) in growth – badly dented the reputation of the Washington Consensus. By the early 2000s, even the main proponents of the Washington Consensus started modifying their positions, even though they fell short of changing anything fundamental. Some others have talked of a post-Washington Consensus, although there is no consensus on what the term exactly means.

Even in this retreat of the free-market orthodoxy, the rejection of selective industrial policy – and all the policy measures that go with it, such as tariff protection, subsidies, regulation on foreign investment, state ownership of industrial and financial firms – continued. Many who were critical of free-market orthodoxy drew the line at selective industrial policy, and argued that, while there is a case for industrial policy, it should be of ‘general’ kind that does not discriminate across sectors – education, training, infrastructure, etc. Selective industrial policy, for many, still remained ‘beyond the pale’.

However, the tide may be finally turning. The 2008 global financial crisis has exposed the limits of the free-market orthodoxy even further. Up until then, many people had assumed that orthodox policies worked in the rich countries, especially the Anglo-American ones where they originated. The problem, the critics argued, was that these policies had been imposed on developing countries where they are not suitable. But the 2008 crisis has shown that these policies are not suitable for the rich countries either. With the crisis blowing up in the United States, the United Kingdom, and the smaller economies that had most aggressively pursued neo-liberal strategy based on financial deregulation (Ireland, Iceland, Dubai, Latvia, etc.), there is a shift in opinion. As the former British business secretary, Lord Peter Mandelson, quipped, there needs to be more “real engineering” and less “financial engineering”, recognizing that selective industrial policy has an important role to play in the process.

At the same time, the government bail-out of GM and Chrysler in the USA, and the subsidies provided to the automobile and other industries by the governments of other developed countries, has exposed the double standards that these countries had applied in advising developing countries not to use active industrial policy.

Of course, it is too early to tell whether all of this – the discrediting of orthodox policies, and the exposure of the double standards of the rich countries – will lead to a revival of industrial policy. However, it is undeniable that the terms of debate on industrial policy have changed. Industrial policy is not a taboo any more. There is an open acknowledgment, even among critics and sceptics, that the declaration of the demise of industrial policy may have been premature. People are increasingly accepting that at least some economies need to rebalance their economies away from the over-blown financial sector, and that this may require active industrial policy. With the exposure of the double standards of the rich countries, developing countries are going to have an easier time defending their industrial policy against criticisms by donor governments and the international financial institutions. This may also affect the evolution of the World Trade Organization and other elements of the world trading system.

Understanding industrial policy

Industrial policy is such a contentious thing that people cannot even agree on its definition, but most of us would define it as "targeting"– or "selective industrial policy". Industrial policy in this sense is usually associated with the East Asian economies (Japan, the Republic of Korea, Taiwan province of China, and Singapore) during their "miracle" years, between the 1950s and the 1980s.

In the early days of the debate on industrial policy – in the late 1970s and the early 1980s – some denied its very existence on the ground that the East Asian countries did not spend much on subsidies. However, it was subsequently revealed that industrial policy in East Asia involved a lot more than handing out tariffs and subsidies to internationally uncompetitive, domestic-market-oriented industries. The range of policy tools deployed was very extensive, including: direct and indirect export subsidies; policies to ensure scale economy; policies aimed at restricting "excessive competition"; regulation on technology imports; requirements imposed on foreign direct investment; state provision and/or subsidizing of research and development (R&D) and worker training.

Moreover, industrial policy was *not* a practice confined to late-20th century East Asia.

First, successful industrial policy experiences in the late 20th century are also found in many European countries (national industrial policies in Austria, Finland, France, and Norway; regional industrial policies in Germany and Italy). Even in the case of the US, there was a lot of "hidden" industrial policy through federal R&D programmes. Despite its free-market rhetoric, when it came to R&D spending, the US government has been more interventionist than many of its competitor governments.. Throughout the post-World War II period, the government's share of total funding in R&D in the US was 40-65%, compared to around 20% in Japan and Korea, and less than 40% in Belgium, Finland, Germany, and Sweden. It is notable that most of the industries where the US has an international technological lead are the industries that have been receiving major government R&D funding through military programmes (e.g., computers, semi-conductors, aircraft) and health projects (e.g., pharmaceuticals, biotechnology).

> "Despite its free-market rhetoric, when it comes to R&D spending, the US government has been more interventionist than many of its competitor governments"

Second, in the 19th and the early 20th centuries, when they were developing countries themselves, all of today's rich countries practiced protectionism and deployed industrial policy through subsidies, public ownership, regulation of foreign direct investments, and a deliberately lax intellectual property rights regime. For example, Britain and the US, countries that most people think invented free trade, were among the most protectionist countries in the world during their respective catch-up periods (mid-18th to mid-19th century, and mid-19th to mid-20th century, respectively). France, Austria, Finland, Norway, Singapore, and Taiwan used state-owned enterprises extensively during the post-WWII period. The US, Japan, Korea, Taiwan, and Finland heavily regulated foreign direct investment when they were at the receiving end of it. The Netherlands and ➤

➤ Switzerland, two countries that did practice (nearly) free trade, refused to introduce a patent law until 1912 and 1907 respectively (on the grounds that a patent, as an artificially-created monopoly, is incompatible with the principle of free trade)

Third, contrary to the popular perception, developing countries did *not* do poorly when they more actively pursued industrial policy during the import substitution industrialization (ISI) period in the 1960s and the 1970s. In fact, during the period, they grew much faster than in the 'age of imperialism', when they were forced into free trade and *laissez-faire* industrial policy through colonial rule or 'unequal treaties' (which deprived them of their tariff autonomy). Under colonial rule or unequal treaties, the economies of many developing countries contracted or at best grew at anaemic rates. Their growth performance in the ISI period was also much better than that in the more recent period of neo-liberalism, when they used less industrial policy. For example, during the 1960s and the 1970s, per capita income in Latin America and Sub-Saharan Africa grew at 3.1% and 1.6% per year respectively. These rates fell to 1.1% and 0.2% between 1980 and 2009.

"If industrial policy is so bad, how is it that in every era the fastest growing economies happen to be those with a strong industrial policy?"

Individually, the above sets of evidence, as well as the evidence about the East Asian experience that we discussed earlier, do *not* prove anything. However, taken together, they raise some difficult questions for the sceptics of industrial policy. If industrial policy was not confined to East Asia in the late-20th century, it becomes difficult to downplay its role in East Asia by resorting to some region- and time-specific "countervailing forces". Even if many countries that have used industrial policy did not succeed, the fact that few of today's rich countries have become rich without industrial policy prompts us to ask whether a good industrial policy may be a necessary, although not sufficient, condition for economic development. Looking at all these sets of facts together, we are bound to wonder if industrial policy is so bad, how is it that in every era the fastest growing economies happen to be those with a strong industrial policy: Britain between the mid-18th and mid-19th centuries; the US, Germany, and Sweden between the late 19th and the early 20th centuries; East Asia, France, Finland, Norway, and Austria in the late 20th century; and China today.

How to do industrial policy better?

While there is actually much stronger empirical evidence for industrial policy than most people think, the debate rages on, and probably never will be conclusively resolved. But the good thing is that we do *not* need some absolute "proof" of its merit, either way, in order to take the debate forward. As far as we can agree that industrial policy can work, at least some of the time, we can still have a productive debate on how to make it work better.

Targeting – selective v. general industrial policy

Many argue that industrial policy should be of a "general" (or "functional"), rather than a "selective" (or "sectoral") kind,that it should provide things like education, R&D, and infrastructure that benefit all industries equally, rather than trying to "pick winners".

One problem with this view is that in a world with scarce resources, there are no truly general industrial policies that affect every industry equally. R&D subsidies favour R&D-intensive industries; infrastructure investment is location-specific; and we cannot train engineers that are equally useful for all industries.

Now, if targeting is inevitable, can we at least say that less targeted policies are better? Unfortunately not – targeting has its merits and problems. Indeed, in social policy many people think the more targeted a policy, the better it is. Instead of debating whether we should target, we should debate what the optimal degrees of targeting are for different types of policies.

Can the state 'beat the market'?

One classic argument against industrial policy is that, given the limits to information and capabilities, the state cannot "beat the market". However, there are quite a few examples in history where government officials made decisions that blatantly went against market signals, only to build some of the most successful businesses in history (e.g., the Japanese auto industry, the Korean steel-maker POSCO, and the Brazilian aerospace company Embraer).

Moreover, in order to explain these success cases, we do not *need* to assume that government officials are omniscient, or even that they are cleverer than capitalists. Many (although not all) of the "superior" decisions made by the state were made because the government officials could look at things from a national and long-term point of view, rather than from a sectional and short-term point of view.

Instead of debating whether the state can beat the market, we should be debating how to improve the personnel and organizational conditions of good state decision-making.

Political economy

Another set of objections to industrial policy may be described as "political economy" arguments where critics have rightly questioned the commitment of the political leadership to economic development, the coherence of the state machinery, and the ability of the state to discipline the recipients of its support.

Political economy problems need to be taken seriously. However, we should not let the best be the enemy of the good. If we wait for the perfect state to emerge, we will never get anything done. In the real world, successful countries are the ones that have managed to find "good enough" solutions to their political economy problems, and went on to implement policies. In order to take the debate forward, we have to discuss how pragmatic improvements can be made to a country's politics.

We have to improve our understanding of issues like: how effective political visions can be formed and deployed to inspire various individuals and groups to act in a concerted manner; how to build nations and communities out of disparate groups that may even have a very long history of mutual hostility and mistrust; how to work out social pacts and build lasting coalitions behind them; how to partially accept but improve the customs and organizational routines in the bureaucracy; and how to minimize socially-harmful lobbying and bribing, while maximizing the flows of information between the state and the private sector. In order to fully address these issues, we economists need to go beyond the usual boundaries and work with practitioners (politicians, government officials, businessmen) as well as academics from other fields (political science, sociology, anthropology, psychology, cultural studies).

> "Instead of debating whether we should target, we should debate what the optimal degrees of targeting are for different types of policies"

Bureaucratic capabilities

However willing and strong the state may be, and however "correct" its vision may be, policies are likely to fail if the government officials implementing them are not capable. Difficult decisions have to be made with limited information and fundamental uncertainty, often under political pressure from inside and outside the country. This requires decision-makers with intelligence and adequate knowledge.

In this context, people have argued that "difficult" policies, like (selective) industrial policy, should not be tried by countries with limited bureaucratic capabilities. And it is for this reason that the World Bank's *East Asian Miracle* report of 1993 recommended the South-east Asian countries (Thailand, Malaysia, and Indonesia), where industrial policy was quite circumscribed partly in recognition of the relatively low quality of their bureaucracies, as models of industrial policy for other developing countries. ➤

> "We need capable bureaucrats in order to design and implement good policies. However, this sensible point is often exaggerated into the policy world equivalent of the 'do not try this at home' warning that is shown on TV when dangerous stunts are performed"

➤ At the general level, I cannot dispute the proposition that we need capable bureaucrats in order to design and implement good policies. However, this sensible point is often exaggerated into the policy world equivalent of the "do not try this at home" warning that is shown on TV when dangerous stunts are performed.

The first problem with this "do not try this at home" argument is that there is no basis for the assumption that industrial policy is more difficult than other policies. Second, another implicit assumption that industrial policy requires a sophisticated knowledge of economics is also unwarranted. The industrial policymakers of East Asia were not economists – they were lawyers in Japan and South Korea, and engineers in Taiwan and China – and until the 1970s what little economics they knew was usually of the "wrong" kind – Marx, the German Historical School, Schumpeter, you name it. Third, the "do not try this at home" argument assumes that high-quality bureaucracies are very difficult to build, and that the East Asian countries were exceptionally lucky to have inherited them from earlier eras. However, high-quality bureaucracy can be built pretty quickly, as shown by the examples of South Korea and Taiwan themselves. Fourth, there is also "learning-by-doing" in policy. Without "trying", you will never master difficult policies. And lastly, the fact that something is "difficult" cannot be a reason not to recommend it. After all, developing countries are routinely told to adopt "best practice" or "global standard" institutions used by the richest countries, even though many of them clearly do not have the capabilities to effectively run such institutions. To be more productive, rather than bemoaning the lack of bureaucratic capabilities in developing countries, we need to have more debate on how to improve them.

Performance measurement

Especially when industrial policy is comprehensive, objective performances become difficult to measure, as virtually all prices are "distorted" and are also subject to manipulation. But rather than debating whether setting and enforcing effective performance targets is possible (as it certainly is), we should concentrate on questions like:

- what performance indicators should be used for which industries?;
- how do we set credible performance targets without becoming too rigid about them?;
- how does the government listen to the private sector without becoming beholden to it?; and
- how do we operate with a long, but not infinite, time horizon?

Export-related industrial policy

Exports have critical roles to play in the conduct of industrial policy in developing countries. To put it bluntly, economic development is impossible without good export performance. Economic development requires the importation of advanced technologies, which need to be paid for with foreign currencies, which in turn have to be acquired, mainly from exports.

Now, saying that exports are the key to economic development is *not* to say that developing countries should adopt free trade. Export success requires significant industrial policy, even for comparative advantage-conforming industries, as export markets have high fixed costs of entry, which smaller firms and farmers may not be able to bear. Direct export subsidies can offset the entry costs, but these are now banned by the WTO, except for the LDCs, so help should be provided through other channels. These may include state marketing help, risk-sharing schemes, initiatives to help small exporters to meet quality standards, and policies to help cooperatives among exporters.

In the longer run, if a country is to continue the momentum of its export success, it is not enough to rely on its comparative advantage-conforming industries. Sooner or later it will have to upgrade its export industries into comparative advantage-defying industries, which requires even stronger industrial policy.

We have to move away from the sterile debate on openness and growth, and explore how free trade, export promotion (which is, of course, not free trade), and infant industry protection can be best integrated with each other.

Changing global environment

Many people argue that the recent changes in the global business environment (such as the rising importance of FDI and the increasing industrial concentration) and changes in global trade and investment rules have made it virtually impossible to implement industrial policy.

It is true that the range of industrial policy measures that developing countries can use has become considerably smaller, compared to the heyday of industrial policy in the 1960s and the 1970s. However, there is still room for manoeuvre for countries that are clever and determined enough. Moreover, especially in the context of the recent world financial crisis, the global business landscape can change significantly, opening up unexpected possibilities of moving up and across global value chains for at least some developing countries. As for the global rules of trade and investment, it is not as if they are some unalterable laws of nature. They can be, and should be, changed, if they are found wanting. Of course, the policy space is in practice highly constrained by the conditions attached to bilateral and multilateral aid and loans, and bilateral and regional trade and investment agreements, which are more restrictive than the WTO. Having said that, I would argue that, as far as all these are man-made rules, we can change them, should we agree that they need changing.

Conclusion

My main purpose here is to plead for "thinking outside the box", and to find the common ground for people on both sides of the industrial policy debate. I believe that once the adversaries abandon theoretical grandstanding, and focus on more practical issues, there are vast and fertile middle grounds to explore.

"The global business landscape can change significantly, opening up unexpected possibilities of moving up and across global value chains for at least some developing countries"

With trade, technology, and talent becoming ever more global, and with national economies increasingly interlinked, **DEBORAH WINCE-SMITH** believes the world needs dynamic strategic partnerships to spur economic growth, development, and jobs.

INTERNATIONAL COOPERATION IS VITAL FOR NATIONAL PROSPERITY

In 1986, when US producers were losing their global market share to the Japanese, the then-CEO of Hewlett-Packard, John Young, created the US Council on Competitiveness to bring together leaders from the private sector to develop and promote a national competitiveness agenda for the United States. The idea struck a chord among US CEOs, university presidents, and labour leaders, and next year the Council's 150 members will celebrate its 25th anniversary. Over the span of a quarter century, the economic challenges facing the United States have changed, as have the global economic players. In fact, the very nature of what competition in the global marketplace means has evolved.

Seismic shifts are radically reshaping the competitive landscape. Anyone with an iPhone or Blackberry, or anyone who uses the Internet, knows that the digital revolution has been an epic force of change. It has fuelled an unprecedented integration of the world's national economies. The incredible proliferation of advanced telecommunications means that knowledge, information, capital, and technological know-how flow across national borders at the speed of light. Wireless devices make every place a potential workplace. Entrepreneurs and small firms, once constrained by their size and resources, can now reach out globally for employees and customers.

DEBORAH WINCE-SMITH is president and CEO of the US Council on Competitiveness

Emerging economies

Another transformational shift is the rapid advance of emerging economies. Just 20 years ago, China, India, and other emerging economies would have been relegated to competing with commodity-based goods, slowly working their way up the ladder of economic development. That model has been shattered. As a result, in just one generation, emerging economies' shares of global imports, global exports, and foreign direct investment have nearly doubled.

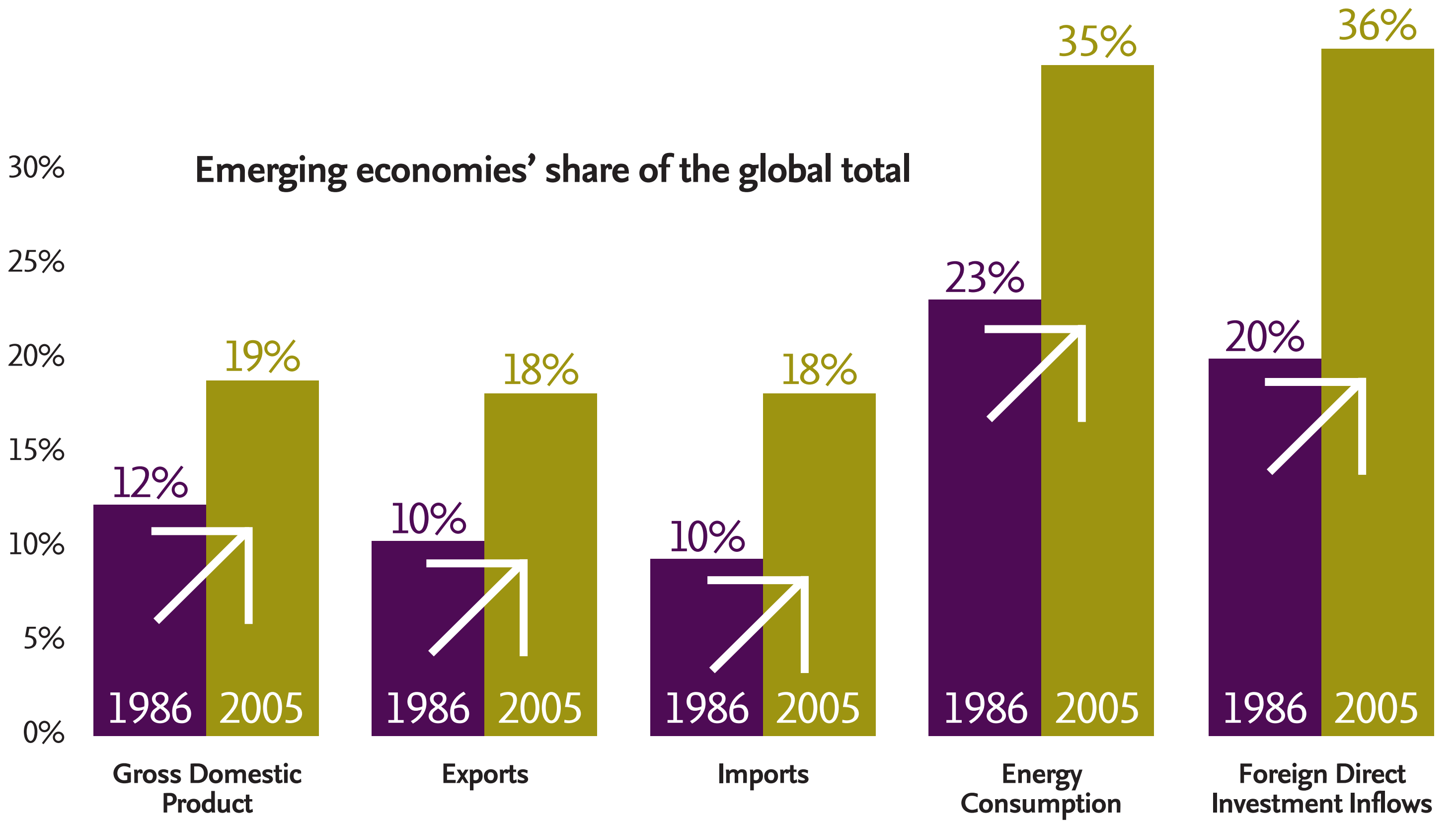
But the issue is not just that emerging economies are growing – it's how they are growing. Innovation's pivotal role in national wealth creation, and a rising standard of living, have prompted many nations to adopt innovation-based growth strategies similar to that of the United States. Governments around the world are boosting public spending on research and development (R&D), building research parks and centres of innovation, and ramping up the production of scientists and engineers.

Another fundamental shift has been in international trade, as multinational companies have evolved into truly global enterprises. Twenty years ago, trade was mostly about goods that moved physically across national borders. But, today, the geographic footprint of supply chains is global. For example, US companies increasingly develop products and services, and serve customers through foreign affiliates and foreign business ventures. In fact, sales from foreign affiliates of US companies are more than *three times greater* than US exports of goods and services. We have to ask ourselves, given this data, what does a trade deficit mean?

Global labour force

The final transformation is the growth of the global labour force. As billions of people in emerging economies entered global commerce, the effective global labour supply quadrupled between 1980 and 2005, with most of the increase occurring after 1990. Legions of educated and skilled people in emerging economies are competing to perform the world's work. The practical effects of this trend: every day it is easier to ship work around the globe in bits and bytes.

As a result, companies outsource an ever-widening array of work – from software development to accounting to research. If work is routine, rule-based, and if it can be digitized, there is a low-cost source of labour



somewhere in the world to compete for that work and those jobs.

While the impact of these transformations is global, every country is seeking to identify policies that will serve its national interest and support national prosperity. But, because of the global nature of trade, technology, and talent, and because the world's economies are ever more linked to each other, these polices cannot be enacted in a vacuum.

Since the US Council convened the first meeting of the Global Federation of Competitiveness Councils (GFCC) in Washington, D.C. in September 2009, tremendous progress has been made toward developing a greater understanding of global business and competitiveness issues. The GFCC has eight founding members: Brazil, Chile, Egypt, India, the Republic of Korea, Saudi Arabia, the United Arab Emirates and the United States, who have pledged time and resources to ensuring a strong foundation for the new organization.

The basic goals of the GFCC include:

- Creating an ongoing dialogue between leaders from competitiveness councils around the world who are committed to their national prosperity and the prosperity of the world.
- Establishing a global forum for the exchange of information, ideas, and best practices between competitiveness councils to promote national competitiveness, and in turn promote global economic growth.
- Identifying emerging challenges and obstacles that jeopardize national competitiveness, global growth, and prosperity through the collaboration of leaders from competitiveness councils around the world.
- Establishing a model of global cooperation on competitiveness that supports national prosperity based on innovation, and sustainable economic growth and development.

"Entrepreneurs and small firms, once constrained by their size and resources, can now reach out globally for employees and customers."

Policy initiatives

In 2010, the GFCC will pursue two groundbreaking policy initiatives – the development of a set of global competitiveness principles, and a review of current competitiveness metrics used in national rankings. Modelled on the global "Call to Action" released at last year's Council on Competitiveness National Energy Security, Innovation and Sustainability Summit and International Dialogue, the competitiveness principles will be a valuable tool in increasing global understanding of factors that affect national competitiveness in a global economy.

Spearheaded by the Presidential Council on National Competitiveness from the Republic of Korea, the initiative to review the current slate of competitiveness metrics builds on a discussion started at the September 2009 meeting of the GFCC. At that meeting, participants questioned if the right metrics were in use, and what new metrics should be considered to adequately evaluate a country's competitiveness.

Around the world, there is growing convergence in national interests that are affected by global economic conditions. The growing interdependence among nations offers a golden opportunity to move beyond static engagement to dynamic global strategic partnerships that will spur economic growth, development, and jobs. ■

Modernizing multilateralism for a multi-polar world

Photo: World Bank

No more geopolitics as usual. **ROBERT ZOELLICK,** President of the World Bank Group, sees decisions and sources of influence flowing around, through, and beyond governments.

If 1989 saw the end of the "Second World" with Communism's demise, then 2009 saw the end of what was known as the "Third World": We are now in a new, fast, evolving multi-polar world economy – where North and South, East and West, are points on a compass, not economic destinies.

Poverty remains and must be addressed. Failed states remain and must be addressed. Global challenges are intensifying and must be addressed. But the manner in which we must address these issues is shifting. The outdated categorizations of First and Third Worlds, donor and supplicant, leader and led, no longer fit.

Today, we already see the strains in multilateralism. The Doha Round of world trade negotiations and the climate change talks in Copenhagen revealed how hard it will be to share mutual benefits and responsibilities between developed and developing countries. And this will be the case for a host of other looming challenges: water; diseases; migration; demographics; and fragile and post-conflict states.

It is no longer possible to solve big international issues without developing country buy-in. But in discovering a new forum in the G-20, we can't impose a new, inflexible hierarchy. Nor can we address this changing world through the prism of the old G-7; developed country interests, even if well-intentioned, cannot represent the perspective of the emerging economies.

Power and responsibility

But modernizing multilateralism isn't all about developed countries learning to adapt to the needs of rising powers. With power comes responsibility. Developing countries need to recognize that they are now part of the global architecture and have an interest in healthy multilateralism.

We cannot afford geopolitics as usual. A 'New Geopolitics of Multi-polar Economy' needs to share responsibility while recognizing different perspectives and circumstances, so as to build mutual interests.

Take financial reform: of course we need better financial regulation. But beware unintended consequences like financial protectionism. Regulations agreed in Brussels, London, Paris or Washington might work for big banks, but could choke off economic opportunity and growth in developing countries. Wall Street has exposed the dangers of financial recklessness, and we need to take heed and serious actions. But financial innovation, when used and supervised prudently, has brought efficiency gains and protected against risk, including for development. A G-7 populist prism can undercut opportunities for billions.

Take climate change: it can be linked to development and win support from developing countries for low carbon growth – but not if it is imposed as a straitjacket. Developing countries need support and finance to invest in cleaner growth paths. Some 1.6 billion people lack access to electricity. While we must take care of the environment, we cannot consign African children to homework by candlelight or deny African workers manufacturing jobs. The challenge is to support transitions to cleaner energy without sacrificing access, productivity, and growth that can pull hundreds of millions out of poverty.

Developing country perspectives

Take crisis response: in a world in transition, the danger is that developed countries focus on summits for financial systems, or concentrate on the mismanagement of developed countries such as Greece. Developing countries need summits for the poor. Hearing the developing country perspective is no longer just a matter of charity or solidarity: it is self-interest. These developing countries are now sources of growth and importers of capital goods and developed countries' services. Developing countries do not just want to discuss high debt in developed countries; they want to focus on productive investments in infrastructure and early childhood development. They want to free markets to create jobs, higher productivity, and growth.

This new world requires multilateral institutions that are fast, flexible, and accountable, that can give voice to the voiceless with resources at the ready. The World Bank Group must reform to help play this role. And it must do so continually at an ever quicker pace. This is why we have launched the most comprehensive reforms in the institution's history, including boosting developing country voting rights and representation. Yet problems need resources to fix them. The World Bank needs more resources to support renewed growth, and to make a modernized multilateralism work in this new multi-polar world economy. Should the recovery falter, we would have to stand on the sidelines. This is why the World Bank is seeking its first capital increase in more than 20 years.

Modern multilateralism

In the new multi-polar global economy, most governmental authority will still reside with nation-states. But many decisions and sources of influence flow around, through, and beyond governments. Modern multilateralism must bring in new players, build cooperation among actors old and new, and harness global and regional institutions to help address threats and seize opportunities that surpass the capacities of individual states.

Modern multilateralism will not be a hierarchical system but look more like the global sprawl of the Internet, interconnecting more and more countries, companies, individuals, and NGOs through a flexible network. Legitimate and effective multilateral institutions, such as the World Bank Group, can form an interconnecting tissue, reaching across the skeletal architecture of this dynamic, multi-polar system. We must support the rise of multiple poles of growth that can benefit all. ■

Image: Feng Yu/istock

COUNTRY FEATURE

China

Image: Alex Nikada/istock

Shanghai: showpiece of the world's fastest-growing major economy.

China's stunning economic rise

In just three decades since initiating the reform and opening-up policy, China has achieved tremendous economic success. Gross Domestic Product growth of about 10% per annum since the late 1970s has helped to lift several hundred million people out of absolute poverty. China alone accounts for over 75% of poverty reduction in the developing world over the last 20 years.

The rise of what is now the world's third-largest economy can be traced back to the late 1970s, when the country's leadership adopted economic reform policies designed to expand rural income and incentives, encourage experiments in enterprise autonomy, reduce central planning, and attract foreign direct investment. The strategy for achieving these aims was dubbed "socialism with Chinese characteristics".

At the local level, peasant farmers were allowed to earn extra income by selling the produce of their private plots on the free market. Nationally, the main move towards a market economy saw local municipalities and provinces allowed to invest in industries that they considered most profitable, which encouraged investment in light manufacturing. China's development strategy shifted emphasis from agriculture to light industry and export-led growth.

The development of the light industrial manufacturing sector proved vital for a developing country working with relatively little capital. The revenues that this sector generated were reinvested in more technologically-advanced production and further capital expenditures and investments.

China's economic boom has been based on very high levels of investment and, in recent years, on soaring export growth. China's entry into the World Trade Organization in 2001 served as a catalyst for a contraction of the state-owned sector, a surge in foreign investment, and explosive growth in private-sector activity. Today, the country is one of the world's top exporters, and is attracting record amounts of foreign investment. In turn, it is investing billions of dollars abroad.

As a member of the World Trade Organization, China benefits from access to foreign markets and agrees to expose itself to competition from abroad. Relations with trading partners have been strained over China's huge trade surplus, and this has led to demands for Beijing to raise the value of its currency, which would make Chinese goods ➤

COUNTRY FEATURE

China

➤ more expensive for foreign buyers.

In the early 1990s, China's manufacturing industry was largely characterized by the assembly-driven production of low-technology goods, but this is no longer the case. Industrial policy has shifted from developing labour-intensive industries during the first two decades of reform, when China's competitiveness in labour-intensive export-oriented manufacturing was at a peak, to capital-intensive, high-tech industries. Although sectors such as textiles still contribute a large share of manufacturing output, a greater proportion of value added output is now derived from electronic goods, many of which are relatively advanced. China is now an important, and, in some cases, world-leading, producer in industries such as mobile phones, integrated circuits, and automobiles.

The fast-growing economy has fuelled demand for energy. China is the largest oil consumer after the United States, and the world's biggest producer and consumer of coal. This over-reliance on imported oil and coal, and the environmental consequences of the massive increase in fossil-fuel use, have prompted a government shift in favour of clean energy. According to Bloomberg New Energy Finance estimates, China spent US$34.6bn. on clean-fuel projects in 2009, almost double the amount invested by the US. Feed-in tariffs for wind power were brought in last year, and the government has also introduced incentives for power companies to install solar panels.

China aims to produce renewable energy equivalent to about 700 million metric tons of coal, or 15% of its power, by 2020. The government wants to cut carbon emissions per unit of gross domestic product by as much as 45% of 2005 levels by 2020, and the country's first commercial carbon capture and storage plant is expected to be operational by the end of the year. ■

Interview with His Excellency **CHEN DEMING**, Minister of Commerce of the People's Republic of China

Going global in great strides

China has achieved an impressive economic performance over the last three decades. What in your view have been the keys to this success?

The key to China's huge economic success is its firm commitment to socialism with Chinese characteristics, and to the policy of 'reform and opening-up' to the outside world. The socialist market economy has taken root in China, with non-public sectors now contributing to around 60% of China's GDP and over 70% of urban and township job creation[…]. From establishing special economic zones to opening up coastal, border, and inland areas; from bringing in, on a large scale, capital, technology, and talent, to going global in great strides, all along China has kept to the strategy of opening-up. The steady advancement of reforms has greatly enhanced productivity, laid down an ever-improving institutional framework for opening-up, and effectively promoted the development of an outward-looking economy[…].

By effectively utilizing both domestic and international markets and resources, actively taking part in the international division of labour, and by strengthening Intellectual Property Rights protection and encouraging innovation, China's competitiveness has been considerably enhanced.

Take, for example, industrial development driven by the process of opening-up: the share of the value added of China's manufacturing sector as a percentage of the world total increased from less than 1.5% in 1980 to 14% in 2007. By 2008, China had become the biggest producer of 172 categories of manufactured products, yielding over US$1 trillion in manufacturing value added, and was ranked as the world's second biggest exporter of manufactured goods.

Reform and opening-up is a basic state policy that China must maintain in the long run. Through reform and opening-up, China's trade and investment environment will further improve, while China and the rest of the world will see more win-win and all-win outcomes. China will not close its door simply for the reason of protectionism, and it will remain one of the most attractive destinations for investors.

How has China tackled the global economic crisis and recession?

Faced with the great challenges brought on by the most severe crisis since the Second World War, the Chinese government has promptly reoriented its macroeconomic policy, set as its primary task the maintenance of steady and speedy economic growth, and focused on boosting domestic demand. A proactive fiscal policy and a moderately easy monetary policy have been pursued in order to step up investment for growth, stimulate consumption for people's well-being, and boost employment to create stability.

A package of countermeasures against the crisis has been implemented:

First, in order to boost domestic demand, fiscal spending has been increased to encourage non-public investment. An investment scheme was introduced over two years, and was worth 4 trillion renminbi (Rmb), or 14% of China's GDP in 2008. Structural tax cuts amounting to Rmb550bn. have been carried out to enhance investment and consumption. Commerce is being invigorated and household consumption stimulated through a number of measures, such as providing fiscal subsidies for the replacement of used cars and household appliances with new ones, and the promotion of cars, household appliances, agricultural machinery, amongst other things, in the countryside.

Second, in order to stabilize the financial market, the interest rate has been brought down five times in a row, resulting in the release of around Rmb800bn. of liquidity, and more financial support has been provided to agriculture and small and medium-sized enterprises.

Third, in order to revitalize industry, plans have been formulated for ten key industries, including automobiles and iron and steel, with a view to promoting industrial restructuring and upgrading.

Fourth, in order to stimulate technological innovation, a National Programme for Medium and Long-Term Scientific and Technological Development has been implemented, with a special emphasis on 16 major projects, including core electronic devices, the development and use of nuclear energy, and advanced numerically-controlled machine tools. The development of emerging industries such as new energy and environmental protection has been pushed forward.

Fifth, in order to ensure people's well-being, Rmb850bn. will be invested in the reform of the medical and health care system over three years; a rural medical insurance programme has been introduced on a pilot basis, covering 90 million people; and support is being provided to the employment of college graduates and migrant rural workers.

As well as expanding domestic demand, the Chinese government has also been stabilizing demand in external markets by keeping the value of the Rmb stable and by enhancing trade facilitation.

In 2009, the preliminary effects of these policies – GDP grew by 8.7%, fiscal revenues by 11.7%, and 11.2 million new jobs were created in urban areas – indicate that China's economy is turning for the better and contributing greatly to the recovery of the world economy.

"The Chinese government is ready to strengthen cooperation and to share the experience and opportunities of development with other countries..."

In terms of future economic development, what are the challenges and difficulties facing China, and how will they be addressed?

Although China is among the first countries in the world to make a rebound, there are still many deep-rooted problems. They are mainly as follows: household income only takes a small share of national income and consumers lack the impetus to spend; some industries have excessive capacity, use too much energy resources, and seriously damage the ecological environment; the level of urbanization remains low, and the rural economy is vulnerable; and the development of social undertakings is slow, with insufficient input in health care, education, housing, and social administration.

The key to addressing these challenges and difficulties, and maintaining steady, rapid economic development, lies in the transformation of the economic growth pattern. This will help ease the systematic and structural bottlenecks constraining China's sound economic development, boost the economy's endogenous dynamism and sustainability, and realize an all-round, balanced, and sustainable development.

Firstly, we need to expedite industrial restructuring. Vigorous efforts will be made to advance the technological upgrading of traditional industries, and to encourage enterprises to use new technology, new techniques, and new equipment. New economic growth, focusing on strategic, emerging industries, will be fostered. Industrial systems featuring low carbon emissions will be built as part of the effort to conserve energy and reduce emissions. The development of the services sector, especially the services for enterprises' production and people's daily life, will be accelerated in a bid to fully leverage the sector's role in job creation.

Secondly, we need to drum up household consumption. Efforts to adjust national income distribution will be beefed up to increase the remuneration of urban and rural workers, enhance people's consumption power, and make the most of the role of consumption in guiding production.

Thirdly, we need to pay more attention to livelihood-related undertakings. A more proactive employment policy will be implemented to create more jobs and expand employment in every possible way. The perfection of the social security system covering both urban and rural areas will be accelerated, investment in social services for public welfare increased, and the social safety net improved.

Fourthly, we need to continue to open more widely to the outside world. Efforts will be made to steadily develop foreign trade. The export mix will be optimized, imports increased, and the processing trade transformed and upgraded. The guideline to utilize foreign direct investment (FDI) will be adhered to, and the structure of FDI utilization optimized. FDI will be encouraged to play a bigger role in building the economy. The implementation of the "going global" strategy will be accelerated, and enterprises will be encouraged to conduct international economic cooperation. Multilateral and bilateral economic and trade ties will be deepened for mutual benefit, win-win opportunities, and shared development with other countries.

To conclude, I want to emphasize that accelerating the transformation of the economic growth pattern is a profound revolution, which needs to be explored and advanced in practice. The Chinese government is ready to strengthen cooperation and to share the experience and opportunities of development with other countries, so as to make a greater contribution to the stability and prosperity of the world. ■

Conventional approaches failed to deliver rapid growth and economic stability. **JOMO KWAME SUNDARAM** believes that governments need to play a developmental role.

Rethinking poverty reduction

Last year, the United Nations Food and Agriculture Organization announced that the number of hungry people in the world increased over the last decade. In 2008, the World Bank announced a significant decline in the number of poor people up to the year 2005. But if poverty is defined principally in terms of the money income needed to avoid hunger, how can announcements such as these be reconciled?

According to the World Bank's much cited "dollar-a-day" international poverty line, which was revised in 2008 to US$1.25 a day in 2005 prices, there are still 1.4 billion people living in poverty, down from 1.9 billion in 1981. However, as China has accounted for most of this decline, there were at least 100 million more people living in poverty outside China in 2005 than in 1981.

In sub-Saharan Africa and parts of Asia, poverty and hunger remain stubbornly high. International agencies estimate that more than 100 million people fell into poverty as a result of higher food prices during 2007-2008, and that the global financial and economic crisis of 2008-2009 accounted for an increase of another 200 million. Delayed job recovery from the global downturn remains a major challenge for poverty reduction in the coming years.

Meanwhile, measurement controversies continue to cast doubt on actual progress. With the 1995 Social Summit adopting a wider definition of poverty that includes deprivation, social exclusion, and lack of participation, the situation today may be even worse than suggested by a money-income poverty line.

Inequality appears to have been on the rise in recent decades at the international level and in most countries. More than 80% of the world's population lives in countries where income differentials are widening. The poorest 40% of the world's population account for

"The poorest 40% of the world's population account for only 5% of world income"

JOMO KWAME SUNDARAM is United Nations Assistant-Secretary-General for Economic Development.

only 5% of world income, while the richest 20% account for 75%.

The mixed record of poverty reduction calls into question the efficacy of conventional approaches. Countries were advised to abandon their national development strategies in favour of globalization, market liberalization, and privatization. Instead of producing sustained rapid growth and economic stability, such policies made countries more vulnerable to the power of the rich and the vagaries of international finance and global instability, which has become more frequent and severe due to deregulation.

The most important lesson is the need for sustained rapid growth and structural economic transformation. Governments need to play a developmental role, with implementation of integrated policies designed to support inclusive output and employment growth, as well as to reduce inequality and promote social justice.

Such an approach needs to be complemented by appropriate industrial investment and technology policies, and by inclusive financial facilities designed to support them. In addition, new and potentially viable production capacities need to be fostered through complementary developmental policies.

By contrast, the insistence on minimal government and reliance on the market led to precipitous declines in public infrastructure investment, particularly in agriculture. This not only impaired long-term growth, but also increased food insecurity.

Advocates of economic liberalization policies cited the success of the rapidly industrializing East Asian economies. But none of these economies had pursued wholesale economic liberalization. Instead, governments played a developmental role by supporting industrialization, higher value-added agriculture and services, and improvement of technological and human capabilities.

Structural transformations should promote full and productive employment as well as decent work, while governments should have enough policy and fiscal space to enable them to play a proactive role and to provide adequate universal social protection.

The last three decades also saw the divorce of social policies from overall development strategies as a consequence of the drive for smaller government. National economic development strategies were replaced with donor-favored poverty-reduction programmes, such as land-titling, microcredit, and "bottom of the pyramid" marketing to the poor.

Such fads have not succeeded in significantly reducing poverty. This is not to deny some positive consequences. For example, microcredit has empowered millions of women, while important lessons have been learnt from the design and implementation of such schemes.

Meanwhile, universal social programmes have improved human welfare much more than targeted and conditional programmes. However, conditional cash-transfer programmes have been quite successful in improving various human-development indicators.

Unfortunately, poverty remains endemic, with more than a billion people going hungry every day. Urgent action is needed, as the recent financial and economic crisis, following hard on the heels of the food-price crisis, is believed to have set back progress on poverty reduction even further. There are also growing fears that climate change will more adversely threaten the lives of the poor.

The United Nations' biennial *Report on the World Social Situation 2010*, entitled *Rethinking Poverty*, makes a compelling case for rethinking poverty-measurement and poverty-reduction efforts. For the world's poor, "business as usual" has never been an acceptable option. Nor have the popular trends of recent decades proven to be much better. There will be no real poverty eradication without equitable and sustainable economic development, which deregulated markets have proved unable to deliver on their own.

"The richest 20% of the world's population account for 75% of world income"

As Mexico prepares to host the next UN Framework Convention on Climate Change (COP16), which will take place from 29 November to 10 December 2010 in Cancún, *Making It* spoke with **JUAN RAFAEL ELVIRA QUESADA**, the country's Secretary of the Environment and Natural Resources

GREENING THE MEXICAN ECONOMY

Image: Ronaldo Schemidt/AFP/Getty Images

Climate change activists campaigning against global warming, Mexico City.

Juan Rafael Elvira Quesada was appointed by President Felipe Calderón to serve as head of the Secretariat of Environment and Natural Resources (Secretaría del Medio Ambiente y Recursos Naturales, SEMARNAT) in December 2006. He has a long and distinguished career in environmental protection in Mexico, and has also served as mayor of the city of Uruapan, Michoacán.

As the head of SEMARNAT, Elvira is responsible for the expansion of protected areas, forestry development, improving access to potable water and increasing sewage treatment, expanding agricultural irrigation, strengthening water conservation measures, and leading the Mexican government's response to climate change.

Elvira says, "Our main focus is working with society, for our success is strongly related to social involvement and compromise. Our actions are reinforced by environmental education, and a strong policy of law enforcement and compliance."

He adds, "The Federal Government implements an environmental policy where natural resources and climate stability are considered public assets that should be preserved."

Mexico, the second largest economy in Latin America, was hit hard by the global economic crisis and the collapse of international trade during the last quarter of 2008 and the first quarter of 2009. Now the country's economy is starting to rebound, with economic activity picking up in the second half of 2009, and off to a strong start in early 2010.

Asked if Mexico is committed to moving towards a 'green economy', Juan Rafael Elvira Quesada is clear, "Achieving sustainable development means that investments should be directed toward clean technologies, renewable energy, and water and waste management, so that every sector of the economy should become 'green'. This includes the creation of green jobs, because one of the main goals of this administration is increasing employment."

Elvira continues, "Greening the economy means reconfiguring businesses and infrastructure to deliver better returns on natural, human and economic capital investments, while reducing greenhouse gas emissions, the use of natural resources, waste generation, and social disparities."

Climate change mitigation is a central part of the country's national development policy. As Mexico is Latin America's largest fossil fuel-consuming country, with the majority of its greenhouse gas emissions coming from energy production and consumption, priority has been given to the introduction of eco-efficiency measures.

For Elvira, improving the environmental performance of industry is a key element. "We have been working very closely with industry to improve industrial environmental performance: The Pollutant Release and Transfer Registry is a public information base that assesses the performance of industry and other sources of pollution, and helps identify opportunities for emission and transfer reduction, while the Environmental Audit Programme assesses industries for their compliance with environmental regulations, and im-

"Investments should be directed toward clean technologies, renewable energy, and water and waste management, so that every sector of the economy should become 'green'."

Juan Rafael Elvira Quesada, Mexico's top environment official.

plements preventative and corrective measures."

Some of the large-scale basic materials industries in Mexico, such as iron and steel, and cement, are among the most efficient in the world. However, a large part of the country's industrial sector is made up of small and medium-sized enterprises that have relatively high energy intensities, often using old equipment, and lacking access to the know-how and finances needed to upgrade. In order to meet these challenges, SEMARNAT is implementing an Environmental Leadership for Competitiveness Programme aiming to improve the competitiveness of the supply chains for small and medium-sized provider industries by means of an environmental management mechanism centred on eco-efficiency. Elvira is enthusiastic about the impact of this programme.

"The results are very promising: water savings of more than 61 million cubic feet – enough to permanently provide water to 3,400 families; annual energy savings of 190 million kWh – equivalent to the annual electricity supply for 66,000 households; and annual reductions of almost 198,000 tonnes of CO_2 and 62,000 tonnes of waste. The participating industries have achieved savings of almost US$69m."

With regard to energy supply, demand for electric power in Mexico has been growing faster than gross domestic product in recent decades, and is likely to continue in the near-future with associated growth in electricity use across the economy. Expanding renewable energy is another key mitigation strategy, and Elvira says, "We have established a goal of 1,957 MW in generation capacity from renewable sources, which will require investments of around US$3bn. from the private sector." One area of great potential is the generation of wind power, particularly on the Isthmus of Tehuantepec – the south-eastern parts of the states of Veracruz and Oaxaca – where high-quality wind resources could deliver some of the lowest-cost wind power in the world.

Under the leadership of President Felipe Calderón, Mexico has pushed hard to become a leading voice on environmental issues, hosting a number of international summits on climate change and inviting climate guru Al Gore to discuss the dangers of inaction. Elvira says, "Mexico is recognized as a leader in the international negotiations on climate change. We have presented the Multinational Fund for Climate Change, known as the 'Green Fund' as a financial scheme that would complement existing mechanisms and ensure the implementation of the Convention on Climate Change."

In the run-up to the COP16 climate summit in Cancún, Mexico is talking up the prospects of a successful outcome, but Elvira says agreement on well-defined goals and actions will require innovative ways of negotiating. "The Parties to the Convention should move towards Cancún with something in their hands, not again to merely plan something. We need to work with clear signals and with mitigation goals: reducing emissions from deforestation and soil degradation, and long-term financing and fast-starting funds for adaptation programmes in developing countries." ■

Revealing research results

By **NOBUYA HARAGUCHI,** industrial development officer in the Development Policy and Strategic Research Branch at UNIDO

Weighing and packaging meat products, Matadero Central S.A., Chontales, Nicaragua. The food and beverage sector constitutes the backbone of many economies.

Photo: Antonio Aragón Renuncio, CREA Comunicaciones, for UNIDO

The rise of manufacturing and decline of agriculture is a well-known pattern of structural change associated with a country's economic development. But what do we know about changes within manufacturing industry while a country is going through the development process? For example, when is the garment sector likely to take off in a given country? How quickly can it grow, and for how long? Which sector is the most sustainable?

These are very relevant questions for policy-makers engaged in economic development but, unfortunately, there have not been many robust empirical studies showing the development paths of different manufacturing sectors.

To help policy-makers gain a better insight, UNIDO has been looking at patterns of industrial development using newly-available statistics covering the last 40 or so years. The research provides some useful inputs for policy formulation.

Firstly, contrary to the available studies and anecdotal evidence, both of which tend to downplay the role of agro-industry in economic development, the research results indicate that the food and beverage sector in fact constitutes the backbone of many countries' economies. It is usually the largest sector within manufacturing industry for most of the period of industrialization, and, even at an advanced level of development, only a few sectors are likely to surpass its output level.

Secondly, small countries (defined as smaller than the world average), which constitute more than 80% of all countries, tend to face a higher degree of uncertainty than larger countries during the development of manufacturing industry. They often have fewer sectors, such as chemicals, machinery and equipment, and electrical apparatus, which can maintain fast growth into their advanced stages of industrialization, and fewer sectors of scale and capital intensiveness, such as basic metals and fabricated metals, which can sustain growth after reaching the income level of US$10,000 per capita. In addition, in small countries, more than 30% of development patterns for many sectors are explained by country-specific characteristics other than the income levels, such as natural and human resource endowment, country size, and wage levels. The influence of country-specific characteristics means that some sectors will not take off, regardless of a country's development level. Important production factors for the development of these sectors, such as natural resources, a critical mass of particular talents, or space for realizing necessary economies of scale, may simply be absent. Thus, it is more important for small than large countries to manoeuvre their manufacturing into the sectors where they are likely to have advantages based on their country characteristics. Then, the government and international supporters should make a

"The food and beverage sector is usually the largest sector within manufacturing industry for most of the period of industrialization, and, even at an advanced level of development, only a few sectors are likely to surpass its output level."

conscious effort to maximize the development potential of these sectors, by upgrading their infrastructure, institutions and human resources.

Thirdly, economies of scale help most of the sectors to increase their output levels. However, agglomeration, which facilitates interactions with customers, suppliers and relevant service providers in close proximity to each other, seems more important for chemical (including fertilizers and soaps), plastic, electrical apparatus, and non-metallic minerals (including cements, pottery and china) production. This suggests that, for these sectors, the formation of industrial districts, if not naturally then through policies to provide related producers and service providers with the appropriate infrastructure, may facilitate the growth of production. Cluster development and the promotion of export consortia may be appropriate approaches for the more labour-intensive producers within these sectors.

Finally, the research results suggest that in small countries, where the domestic market is usually too small to support sustained sectoral growth, and industrial development is therefore often dependent on exports, keeping unit labour costs low relative to the competing producers is essential. The maintenance of unit labour costs at a competitive level is an important factor contributing to the success of the export trade, and it can be achieved by keeping wages low, by increasing labour productivity, or both. Since in many developing countries the wage levels of production workers are generally already low, continuous increases in labour productivity are usually more appropriate. The rewards of having competitively-priced products by increasing productivity could be potentially enormous for small countries which could then have a disproportionately large production scale to serve the world markets. ■

The private sector and development

By **KAREN ELLIS**, head of the Overseas Development Institute's Business and Development Programme

There is growing recognition that the potential contribution of the private sector to development far outstrips the potential impact of aid. Business itself is recognizing its potential role, with growing demand for ethical and Fair Trade produce. But more could be done, through new tools to measure the impact of business on development, new business models to maximize the development contribution of the private sector, and a better policy framework governing business engagement.

New tools

Last year, the Overseas Development Institute (ODI), the UK Department for International Development (DFID), and Business Action for Africa ran a series of meetings on business and development attended by many businesses that wanted advice on improving and communicating their development impact. ODI is developing tools to help, such as a proposed new 'Good for Development' mark, which companies could use if they score highly enough against indicators linked to the Millennium Development Goals. Support from DFID could help ODI to pilot this initiative with business this year.

A Good for Development mark could provide commercial advantage to businesses that are making a significant and positive contribution to achieving the Millennium Development Goals through both their core business and corporate social responsibility activities. It would differ from other schemes by focusing on the positive contributions made to economic development, (e.g. through job creation and skills development) rather than simply meeting minimum labour standards or minimizing environmental costs.

New policy frameworks

At the same time, the impact of business on development depends on the policy framework in which it operates in developing countries. ODI research confirms that a good investment climate and open and competitive markets can help to ensure a good development impact, but these are rare in developing countries. New approaches are needed to tackle market distortions created by vested interests who are opposed to pro-growth reforms. For example, ODI proposes new approaches to the mobilization of business interests in favour of pro-growth reform, to offset vested interests who oppose reform.

Since the financial crisis, more emphasis has been placed on the role of the state in disciplining and managing the market. In developing countries there is a great deal of government intervention in the market, e.g. through industrial policies that often distort and that are damaging to markets. The time is ripe for a new kind of ➤

➤ industrial policy. This would not be about picking winners, or providing subsidies or import protection. Instead, it would be about the intelligent and carefully prioritized use of government policy to encourage and facilitate private sector development in promising high growth sectors, and in a market-friendly way.

Practical proposals

While the Washington Consensus has paralyzed intelligent discussion of this issue, the crisis has reopened the debate. ODI has practical proposals on this middle way, based on extensive fieldwork:

- Consult business to identify growth sectors that could be transformative – enabling economies to move from low-skilled commodity-based industries, to sectors with more scope for technological progress and the building of human capital.
- Help these sectors grow by identifying, again in consultation with business, priorities for reform.
- Work with business to encourage business models that are pro-development.

The private sector also has a crucial role to play in low carbon growth in developing countries, but will only fulfill its potential when the right policies are in place. ODI has reviewed low carbon growth/climate change response strategies across a number of developing countries, and identified lessons for growth policy, e.g. the importance of being proactive in identifying and capitalizing on new green growth opportunities. But we found that few provide enough certainty or information on future direction to enable the private sector to invest with confidence. ODI wants to facilitate dialogue between government and the private sector on this challenging issue, and would welcome support for this.

Access to finance is crucial for private sector development and for poverty reduction. ODI research shows that access to savings or credit helps people across all income groups to invest in education and microenterprises, and to work their way out of poverty. While the focus of much donor effort has been on microfinance institutions, the banking sector also has an important role to play. We have also examined market-friendly policies that can stimulate wider provision of financial services by the banking sector, and our practical policy recommendations include:

- setting targets for the banking sector to widen access to services, and monitoring and publicizing the results;
- facilitating linkages between the formal banking sector and semi-formal institutions that reach the poor more easily;
- supporting innovative cost-saving technologies and business models. ■

The power of patient capital

By **JACQUELINE NOVOGRATZ**, the founder and CEO of Acumen Fund, a non-profit global venture fund that uses entrepreneurial approaches to solve the problems of global poverty.

A new field of international development has emerged in the last ten years that seeks to harness the power of market forces. Social investors and donors are using "patient capital" to bet on enterprises addressing global challenges like the persistent threat of malaria, lack of clean drinking water, chronic malnutrition, and lack of education. Patient capital fills a critical gap in the aid and capital markets, allows for experimentation and innovation, and has begun to demonstrate real results.

While traditional capital investing focuses on maximizing financial returns, patient capital recognizes the particular challenges of working in low-income communities, including creating acceptance for new products, operating with poor infrastructure, and serving customers with low levels of income and trust. Patient capital has a higher tolerance for risk and a longer time horizon for investment than more traditional capital, is often accompanied by significant management assistance, and is primarily focused on social impact.

Acumen Fund was launched in 2001 to bring this model of development to major global challenges, with an initial focus on India, Pakistan, and East Africa. Since then, we have invested roughly US$40 million in 40 companies that are forging a new path to deliver critical products and services to millions in a way that is sustainable in the long run. Acumen Fund's portfolio includes companies like Water Health International in India, which operates 285 village-level water purification systems, providing over 240,000 low-income individuals with access to safe water, and D.Light Design in India and Tanzania, which has sold more than 200,000 low-cost solar LED lights, providing safe, affordable energy to more than 1 million people.

Each of these companies provides a new model for large-scale sustainable change. The challenge is to strengthen proven business models, and scale them up to provide quality goods and services to tens of millions of people who want the chance to improve their lives. Ultimately, these ideas will only achieve their greatest impact through partnerships with mainstream private sector institutions, such as banks and multinational corporations, as well as with governmental institutions, that can create an enabling environment for innovations to scale.

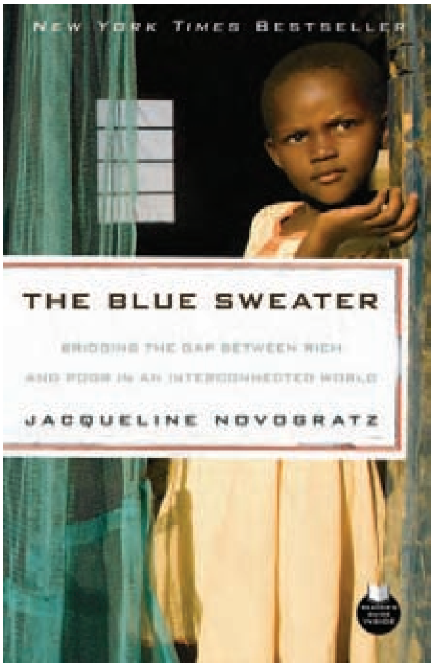
At present, I see the funding gap both in incubating promising ideas, and accelerating the scale-up of ideas that have demonstrated significant promise, but whose financial models are not yet attractive to the traditional capital markets.

In many cases, entrepreneurs bring a needed perspective because, by necessity, they must remain attuned to the needs of their customers. Let's take one example from India. There, more than 75% of farmers cultivate less than two hectares of land, but for decades, both aid programmes and the market have overlooked smallholder farmers, limiting their access to critical farming technologies. In 2001, Amitabha Sadangi designed a drip irrigation technology that would be affordable and useful to the world's poorest farmers. His organization, International Development Enterprises – India (IDE-I), initially relied on grants to build a prototype and learn how to market effectively to low-income farmers. Acumen Fund's patient capital enabled him to form a for-profit company, Global Easy Water Products (GEWP), to build on the research and marketing strengths of IDE-I and to focus on expanding distribution and tapping into export markets. More than 250,000 farmers have purchased drip products through IDE-I and GEWP, allowing many of the farmers to double or triple their incomes on an annual basis.

As I write in my book, *The Blue Sweater: Bridging the Gap between Rich and Poor in an Interconnected World*, "I've learned that many of the answers to poverty lie in the space between the market and charity, and that what is needed most of all is moral leadership willing to build solutions from the perspectives of poor people themselves, rather than imposing grand theories and plans upon them." Patient capital is invested in entrepreneurs building such solutions.

The world needs a new vision for development assistance. At a moment when the aid system faces increasing scrutiny and criticism, the global community has an opportunity to strengthen assistance programmes with a complementary approach focused on social innovation and entrepreneurship. ■

"What is needed most of all is moral leadership willing to build solutions from the perspectives of poor people themselves, rather than imposing grand theories and plans upon them."



Awareness-raising for workers in Djibouti. AIDS is a workplace issue not only because it affects labour and productivity, but also because the workplace is one of the most effective settings for responding to the epidemic.

HIV/AIDS – a workplace issue

MICHEL SIDIBÉ, Executive Director of UNAIDS, believes that the workplace has a vital role to play in the wider struggle to limit the spread and effects of the AIDS epidemic.

The vast majority of the world's 33 million people living with HIV are aged 15-49 and are in the prime of their working lives. This has critical implications for businesses and national economies, as well as for individual workers and their families.

AIDS is a workplace issue for many reasons. Stigma and discrimination can threaten the fundamental rights of employees living with HIV. The loss of workers, and their skills and experience, can increase the burden on the remaining workforce, lowering morale and reducing productivity.

The economic impact is particularly severe in least developed countries (LDCs), where the combined impact of HIV-related absenteeism, productivity decline, health expenditures, and recruitment and training expenses, is reducing profits.

As two out of three people living with HIV go to work each day, the workplace is one of the most effective settings for responding to the epidemic. The business sector has a vital role to play in limiting the spread of HIV and the impact of the epidemic, and a growing number of companies, even in the poorest countries, are taking up the challenge.

What can business do?

Every business can make its own contribution to the AIDS response – based on its size, type of workforce, location, financial strength, and core capabilities. The activities often fall into five main categories: HIV workplace programmes, advocacy, financial support, in-kind contributions (including technical support), and research.

HIV workplace programmes: These programmes expand access to HIV prevention, treatment, care and support services directly to employees. The International Labour Organization and UNAIDS work with companies to promote HIV policies and programmes in the workplace.

Advocacy: Businesses can disseminate vital information on HIV through the mass media. Businesses can also participate in policy dialogue and lobbying for effective HIV policies.

Cash donations: Financial resources are urgently needed to support HIV prevention, treatment, care and support services. Business is becoming a contributor to the AIDS response by donating financial resources for HIV and health-related programmes.

In-kind contributions: Business expertise, services and materials are needed in every aspect of the AIDS response. In-kind contributions from business can include the donation of advisory services, seconded personnel, printing, office facilities, equipment, supplies and access to distribution networks. Companies may offer logistical support and networks for the distribution of commodities, such as condoms and antiretrovirals.

Research: UNAIDS supports public-private partnerships, working to accelerate the development of preventive HIV technologies, such as microbicides (a synthetic or natural substance in the form of a gel, cream, suppository, or film that can kill or neutralize viruses and bacteria), improved female condoms, and a vaccine, as well as advances in therapies such as simpler and more effective next-generation drugs.

UNAIDS works closely with companies and foundations in each one of its priority areas, particularly the reduction of sexual transmission of HIV, the prevention of mother to child transmission of HIV (PMTCT), the reduction of TB/HIV co-infection, and the empowerment of women and girls. Examples of these partnerships include Chevron's financial contribution to PMTCT in Angola, and the UNAIDS Body Shop global campaign around World AIDS Day.

Over twenty years into the epidemic, we can confidently say that early investments in the AIDS response have had long-term benefits. For example, we have seen how early HIV education and prevention investments in Senegal have resulted in one of the lowest infection rates in sub-Saharan Africa.

Business coalitions

UNAIDS has supported the development of a number of national business coalitions on HIV in regions hardest hit by the epidemic. UNAIDS is currently working with over 30 national business coalitions, helping to support the private sector response to AIDS.

In Tanzania, the AIDS Business Coalition in Tanzania has made significant headway in mobilizing businesses to respond to HIV. It has supported the establishment of workplace programmes in several companies, conducted various workshops and training on HIV prevention and treatment, and developed a generic HIV policy to be used by all companies. In just twelve months, its membership increased by 91%.

The Ethiopian Business Coalition against HIV/AIDS, created in 2004, has also encouraged businesses to move from providing information to its employees to service provision. This includes voluntary counselling and HIV testing, care for people living with HIV, facilitating access to antiretrovirals, and local referrals. Some businesses have even gone beyond the workplace, extending support to families of HIV-positive employees.

In Bangladesh, the US organization, Pathfinder, works with local non-governmental organizations (NGOs) to provide factory-based health services to garment workers, an overwhelming majority of whom are young, unmarried women. The workplace programmes are part of a large national programme to provide clinic- and community-based essential health services in partnership with 41 local and national NGOs.

The message is clear – if LDCs want to boost their economies, then employers must make HIV their business. By protecting their workforce from HIV, private companies and the public sector can benefit from increased productivity and reap financial gains. ■

MakingIt
Industry for Development

FURTHER READING

Arun, Thankom and Hulme, David (Editors) – Microfinance: A Reader
Chang, Ha-Joon – Bad Samaritans: The Myth of Free Trade and the Secret History of Capitalism
Chossudovsky, Michel – The Globalization of Poverty and the New World Order
Chowdhury, Anis and Islam Iyanatul – Growth, Employment, and Poverty Reduction in Indonesia
Easterly, William – The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good
Edward, Tse – The China Strategy: Harnessing the Power of the World's Fastest-Growing Economy
Gupta, Anil K. and Wang, Haiyan – Getting China and India Right: Strategies for Leveraging the World's Fastest Growing Economies for Global Advantage
McNeill, Desmond and St. Clair, Asunción Lera – Global Poverty, Ethics and Human Rights: The Role of Multilateral Organizations
Rodrik, Dani – One Economics, Many Recipes: Globalization, Institutions, and Economic Growth
Sachs, Jeffrey – The End of Poverty: Economic Possibilities for Our Time
Sanchez, Teodoro – The Hidden Energy Crisis: How Policies are Failing the World's Poor
Smith, Michael, et al. – Cents and Sustainability: Making Sense of How to Grow Economies, Build Communities and Revive the Environment in Our Lifetime.

FURTHER SURFING

http://blogs.cgdev.org/globaldevelopment – The Centre for Global Development's weblog.
http://ourworld.unu.edu/en/ – Web magazine focusing on climate, peak oil, food security and biodiversity.
http://rodrik.typepad.com – "Unconventional thoughts on economic development and globalization." Dani Rodrik's weblog.
www.chinadaily.com.cn – The largest English portal in China, providing news, business information, etc.
www.compete.org/about-us/initiatives/gii – The Council on Competitiveness' Global Initiative "seeks collaborations around the world with critical US partners to build business environments that support innovation at home and abroad."
www.iied.org/sustainable-markets/blog/due-south – The International Institute for Environment and Development's weblog.
www.networkideas.org – International Development Economics Associates is a network of progressive economists.
www.oxfamblogs.org/fp2p – From Poverty to Power. Duncan Green's weblog.
www.policyinnovations.org – "The best new thinking on a fairer globalization."
www.twnside.org.sg – Third World Network of individuals and organizations involved in issues relating to development, the Third World, and North-South issues.
www.wider.unu.edu – World Institute for Development Economics Research of the United Nations University.

MakingIt
Industry for Development

A quarterly magazine aiming to stimulate debate about global industrial development issues

UNIDO
UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION